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=> FIL REG
FILE 'REGISTRY' ENTERED AT 12:24:49 ON 24 AUG 2010
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=> D HIS NOFILE

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                  E US2006-580491/APPS
L1             1 SEA SPE=ON  ABB=ON  PLU=ON  US2006-580491/AP
                  E DE2003-10356099/APPS
L2             1 SEA SPE=ON  ABB=ON  PLU=ON  (DE2003-10356099/AP OR
                  DE2003-10356099/PRN)
                  E WO2004-EP13314/APPS
L3             1 SEA SPE=ON  ABB=ON  PLU=ON  (WO2004-EP13314/AP OR WO2004-EP
                  13314/PRN)
L4             1 SEA SPE=ON  ABB=ON  PLU=ON  (L1 OR L2 OR L3)
                  SEL L4 RN

     FILE 'REGISTRY' ENTERED AT 11:10:59 ON 24 AUG 2010
L5            23 SEA SPE=ON  ABB=ON  PLU=ON  (289-80-5/BI OR 289-95-2/BI OR

     FILE 'HCAPLUS' ENTERED AT 11:12:23 ON 24 AUG 2010
                  SEL L4 AU
L6           153 SEA SPE=ON  ABB=ON  PLU=ON  ("GERHARD, ANJA"/AU OR
                  "STOESSEL, PHILIPP"/AU OR "VESTWEBER, HORST"/AU)
                  E MERCK PATENT/CO
L7          5020 SEA SPE=ON  ABB=ON  PLU=ON  ("MERCK PATENT CO LTD"+ALL/CO,C

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L8                STR

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L9            50 SEA SSS SAM L8

     FILE 'HCAPLUS' ENTERED AT 11:17:26 ON 24 AUG 2010
L10       214655 SEA SPE=ON  ABB=ON  PLU=ON  (ELECTROLUM!N? OR ORGANOLUM!N?
L11       811875 SEA SPE=ON  ABB=ON  PLU=ON  ?BLOCK?
L12         5961 SEA SPE=ON  ABB=ON  PLU=ON  L10 AND L11
L13              TRA PLU=ON  L12 1- RN :   16289 TERMS

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L16               STR

     FILE 'REGISTRY' ENTERED AT 11:24:16 ON 24 AUG 2010
L17           14 SEA SUB=L14 SSS SAM (L8 AND L16)
L18          291 SEA SUB=L14 SSS FUL (L8 AND L16)
                  SAV L18 CLA491/A

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L20          869 SEA SPE=ON  ABB=ON  PLU=ON  L19 AND L10
L21          151 SEA SPE=ON  ABB=ON  PLU=ON  L20 AND L11
L22              TRA PLU=ON  L21 1- RN HIT :     291 TERMS
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                E N2CN2C/ES
L25           0 SEA SPE=ON  ABB=ON  PLU=ON  N2CN2C/ES AND L18
                E N3CNC/ES
L26           0 SEA SPE=ON  ABB=ON  PLU=ON  N3CNC/ES AND L18
                E N3C3/ES
L27           0 SEA SPE=ON  ABB=ON  PLU=ON  N3C3/ES AND L18
                E N2CNC2/ES
L28           2 SEA SPE=ON  ABB=ON  PLU=ON  N2CNC2/ES AND L18
                E N2C4/ES
L29           1 SEA SPE=ON  ABB=ON  PLU=ON  N2C4/ES AND L18
                E NCNC3/ES
L30          66 SEA SPE=ON  ABB=ON  PLU=ON  NCNC3/ES AND L18
                E NC2NC2/ES
L31           8 SEA SPE=ON  ABB=ON  PLU=ON  NC2NC2/ES AND L18
L32          77 SEA SPE=ON  ABB=ON  PLU=ON  L28 OR L29 OR L30 OR L31

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L33       59282 SEA SPE=ON  ABB=ON  PLU=ON  L32
L34         245 SEA SPE=ON  ABB=ON  PLU=ON  L33 AND L10
L35          49 SEA SPE=ON  ABB=ON  PLU=ON  L34 AND L11
L36           1 SEA SPE=ON  ABB=ON  PLU=ON  L35 AND (L6 OR L7)
L37          48 SEA SPE=ON  ABB=ON  PLU=ON  L35 NOT L36
L38          15 SEA SPE=ON  ABB=ON  PLU=ON  1808-2003/PY,PRY,AY AND L37



     FILE 'REGISTRY' ENTERED AT 12:24:49 ON 24 AUG 2010

=> D L18 QUE STAT
L8              STR

 Hy 1



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT   IS MCY  UNS  AT   1
DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS M2-X4 C  M2-X4 N  AT   1

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   1

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                ORGANOLUM!N? OR (ELECTRO OR ORGANO OR ORG#)(2A)LUM!N? OR
                LIGHT?(2A)(EMIT? OR EMISSION?) OR EL OR E(W)L OR L(W)E(W)D
                OR OLED)/BI,AB OR LED/IT
L11      811875 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  ?BLOCK?
L12        5961 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L10 AND L11
L13             TRANSFER  PLU=ON  L12 1- RN :   16289 TERMS
L14       16289 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L13
L16             STR
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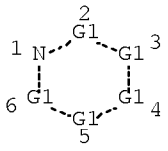

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DEFAULT ECLEVEL IS LIMITED

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NUMBER OF NODES IS 6

STEREO ATTRIBUTES: NONE
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100.0% PROCESSED 2817 ITERATIONS 291 ANSWERS
SEARCH TIME: 00.00.01

=> FIL HCAP
FILE 'HCAPLUS' ENTERED AT 12:25:04 ON 24 AUG 2010
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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=> D L36 1 IBIB ABS HITSTR HITIND RETABLE

L36 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2005:493816 HCAPLUS Full-text
DOCUMENT NUMBER: 143:34908
TITLE: Organic electroluminescent element hole-blocking layers with six-membered ring unit-containing compounds and spirobifluorene derivatives and electronic devices using them
INVENTOR(S): Vestweber, Horst; Gerhard, Anja ; Stoessel, Philipp
PATENT ASSIGNEE(S): Covion Organic Semiconductors G.m.b.H., Germany
SOURCE: PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005053055	A1	20050609	WO 2004-EP13314	20041124
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,				

GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,
KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD,
SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ,
DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL,
PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG

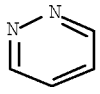
DE 10356099	A1	20050707	DE 2003-10356099	20031127
EP 1687857	A1	20060809	EP 2004-803245	20041124
EP 1687857	B1	20090909		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
CN 1954446	A	20070425	CN 2004-80035289	20041124
JP 2007520875	T	20070726	JP 2006-540365	20041124
AT 442675	T	20090915	AT 2004-803245	20041124
US 20070051944	A1	20070308	US 2006-580491	20060523
KR 2006122874	A	20061130	KR 2006-710343	20060526
PRIORITY APPLN. INFO.:			DE 2003-10356099 A	20031127
			WO 2004-EP13314 W	20041124

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 143:34908

AB Organic electroluminescent devices comprising an anode, a cathode, and ≥1 emitting layer, which consists of a matrix material which is doped with ≥1 phosphorescent emitter, are described which employ compds. including units based on six-membered rings formed from C and/or N atoms, especially triazines, pyrimidines, pyridazines, and pyrazines, as materials for a hole-blocking layer between the emitting layer and the cathode. Compds., which may be employed in the devices, are described which comprise spirobifluorene derivs. with ≥1 triazine unit bonded to them, optionally along with other six-membered ring-containing substituents. The use of the design of the electroluminescent devices in other electronic devices, including organic transistors, organic integrated circuits, organic solar cells, organic laser diodes, or photoreceptors, is also described. Organic transistors, organic integrated circuits, organic solar cells, organic laser diodes, or photoreceptors.

IT 289-80-5D, Pyridazine, derivs. 289-95-2D, Pyrimidine, derivs. 290-37-9D, Pyrazine, derivs.
(organic electroluminescent element with hole-blocking layers formed from compds. including six-membered rings and spirobifluorene derivs. and electronic devices using them)

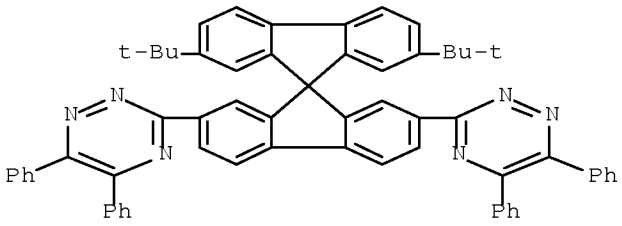
RN 289-80-5 HCAPLUS
CN Pyridazine (CA INDEX NAME)



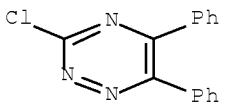
RN 289-95-2 HCAPLUS
CN Pyrimidine (CA INDEX NAME)

RN 290-37-9 HCAPLUS
CN Pyrazine (CA INDEX NAME)

IT 853154-61-7P
(organic electroluminescent element with hole-blocking layers formed from compds. including six-membered rings and spirobifluorene derivs. and electronic devices using them)
RN 853154-61-7 HCAPLUS
CN 1,2,4-Triazine, 3,3'-[2',7'-bis(1,1-dimethylethyl)-9,9'-spirobi[9H-fluorene]-2,7-diyl]bis[5,6-diphenyl- (CA INDEX NAME)



IT 34177-11-2, 3-Chloro-5,6-diphenyl-1,2,4-triazine
(organic electroluminescent element with hole-blocking layers formed from compds. including six-membered rings and spirobifluorene derivs. and electronic devices using them)
RN 34177-11-2 HCAPLUS
CN 1,2,4-Triazine, 3-chloro-5,6-diphenyl- (CA INDEX NAME)



IPCI H01L0051-30 [ICM,7]; H01L0051-05 [ICM,7,C*]; C07D0251-24 [ICS,7]; C07D0251-00 [ICS,7,C*]; C07D0253-06 [ICS,7]; C07D0253-00 [ICS,7,C*]; C07D0239-26 [ICS,7]; C07D0239-00 [ICS,7,C*]

IPCR C07D0239-00 [I,C*]; C07D0239-26 [I,A]; C07D0251-00 [I,C*]; C07D0251-24 [I,A]; C07D0253-00 [I,C*]; C07D0253-065 [I,A]; H01L0051-05 [I,C*]; H01L0051-30 [I,A]

CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 25, 27, 28, 74, 76

ST spirobifluorene deriv hole blocking layer electronic device; transistor six membered ring deriv hole blocking layer; integrated circuit six membered ring deriv hole blocking layer; solar cell six membered ring deriv hole blocking layer; laser diode six membered ring deriv hole blocking layer; photoreceptor six membered ring deriv hole blocking layer; six membered ring deriv hole blocking layer electronic device; triazine deriv hole blocking layer org electroluminescent device; pyrimidine deriv hole blocking layer org electroluminescent device; pyrazine deriv hole blocking layer org electroluminescent device; pyridazine deriv hole blocking layer org electroluminescent device

IT Imines
Ketones, uses
Phosphazenes
Phosphines
Sulfones
Sulfoxides
(emitting layer matrix; organic electroluminescent element with hole-blocking layers formed from compds. including six-membered rings and spirobifluorene derivs. and electronic devices using them)

IT Spiro compounds
(organic electroluminescent element with hole-blocking layers formed from compds. including six-membered rings and spirobifluorene derivs. and electronic devices using them)

IT Electroluminescent devices
Electrophotographic photoconductors (photoreceptors)
Integrated circuits
Semiconductor lasers
Solar cells
Transistors
(organic; organic electroluminescent element with hole-blocking layers formed from compds. including six-membered rings and spirobifluorene derivs. and electronic devices using them)

IT 7439-98-7D, Molybdenum, derivs. 7440-04-2D, Osmium, derivs. 7440-05-3D, Palladium, derivs. 7440-06-4D, Platinum, derivs. 7440-15-5D, Rhenium, derivs. 7440-16-6D, Rhodium, derivs. 7440-18-8D, Ruthenium, derivs. 7440-22-4D, Silver, derivs. 7440-33-7D, Tungsten, derivs. 7440-53-1D, Europium, derivs. 7440-57-5D, Gold, derivs.
(emitting layer dopant; organic electroluminescent element with hole-blocking layers formed from compds. including six-membered rings and spirobifluorene derivs. and electronic devices using them)

IT 289-80-5D, Pyridazine, derivs. 289-95-2D, Pyrimidine, derivs. 290-37-9D, Pyrazine, derivs. 782504-07-8

(organic electroluminescent element with hole-blocking layers formed from compds. including six-membered rings and spirobifluorene derivs. and electronic devices using them)

IT 94928-86-6, Tris(2-phenylpyridine)iridium
(organic electroluminescent element with hole-blocking layers formed from compds. including six-membered rings and spirobifluorene derivs. and electronic devices using them)

IT 853154-59-3P 853154-60-6P 853154-61-7P
(organic electroluminescent element with hole-blocking layers formed from compds. including six-membered rings and spirobifluorene derivs. and electronic devices using them)

IT 3842-55-5, 2-Chloro-4,6-diphenyl-1,3,5-triazine 34177-11-2, 3-Chloro-5,6-diphenyl-1,2,4-triazine 463944-32-3 853154-62-8
(organic electroluminescent element with hole-blocking layers formed from compds. including six-membered rings and spirobifluorene derivs. and electronic devices using them)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon	2003	2003		PATENT ABSTRACTS OF	
Fink, R	2002			US 6352791 B1	HCAPLUS
Hayoz, P	2004			WO 2004077885 A	HCAPLUS
Hoechst Ag	1996			DE 4446818 A1	HCAPLUS
Hu, N	2001			US 6229012 B1	HCAPLUS
Jean-Hugues, F	2004	69	1762	JOURNAL OF ORGANIC C	
Nishi, T	2002			US 2002034659 A1	HCAPLUS
Toray Ind Inc	2003			JP 2003086381 A	HCAPLUS
Wu, C	2002	81	577	APPLIED PHYSICS LETT	HCAPLUS
Xerox Corporation	2004			EP 1385221 A	HCAPLUS

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)

=> D L38 1-15 IBIB ABS HITSTR HITIND RETABLE

L38 ANSWER 1 OF 15 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2005:1255919 HCAPLUS Full-text
DOCUMENT NUMBER: 144:17835
TITLE: Indirect labeling technology for linear amplification of gene chip using biochemiluminescent nanospheres as high-load signal carriers
INVENTOR(S): Song, Ke
PATENT ASSIGNEE(S): Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 25 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1607258	A	20050420	CN 2003-10107913	20031015

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PRIORITY APPLN. INFO.: CN 2003-10107913 20031015

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AB A highly sensitive and economic labeling technol for linear amplification of gene chip is provided. The method utilizes fluorescent or biochemiluminescent nanospheres as high-load signal carriers to greatly enhance the sensitivity of detection. The technol. overcomes the disadvantages associated with direct labeling method such as impossibility of accurate quantification, low sensitivity and high cost, and produces fluorescent signals with intensity in a magnified proportion to the actual abundance of the genes expressed or hybridized to the chip. The invention also resolves the problem associated with direct labeling method that the labeling is affected by the cDNA hybridization efficiency.

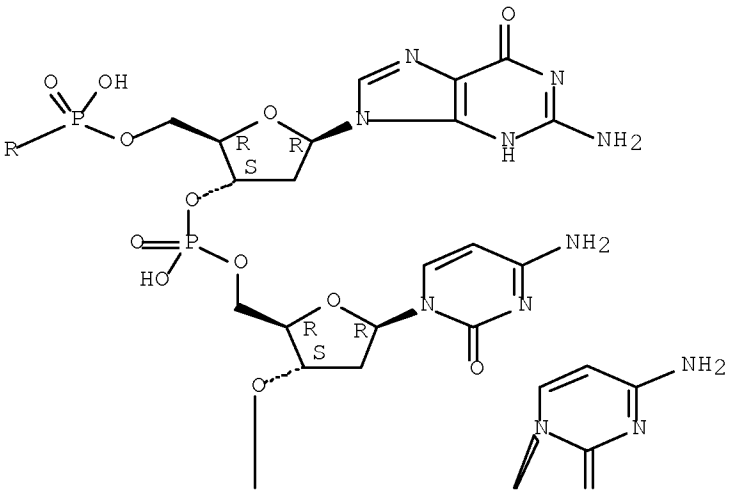
IT 870128-03-3
(acceptor sequence; indirect labeling technol. for linear amplification of gene chip using biochemiluminescent nanospheres as high-load signal carriers)

RN 870128-03-3 HCAPLUS

CN Thymidine, thymidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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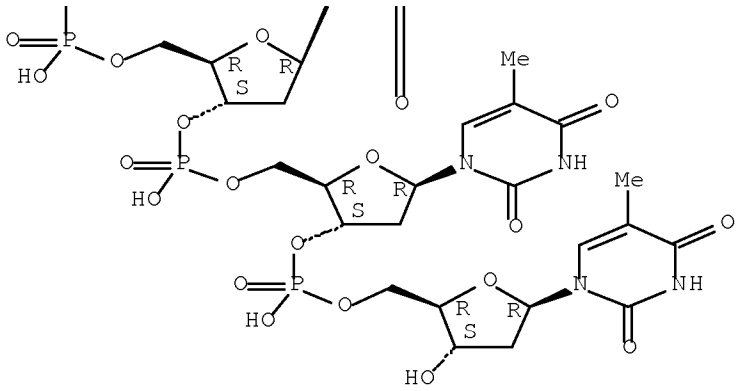

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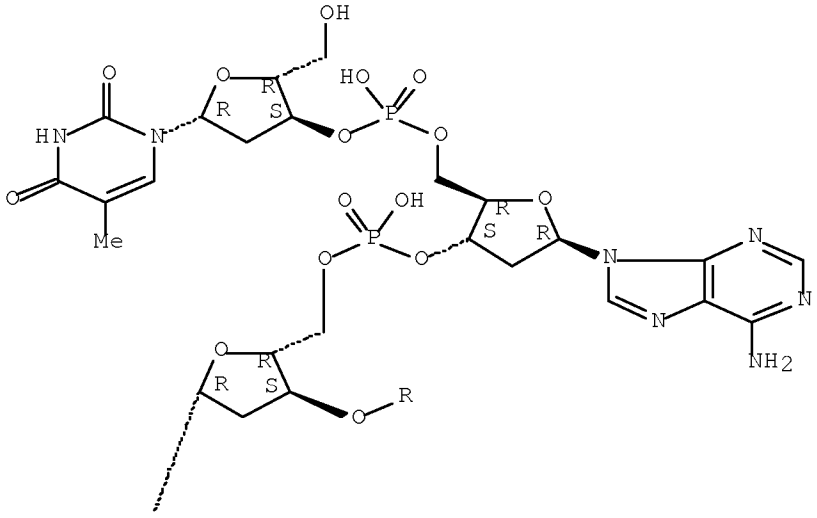
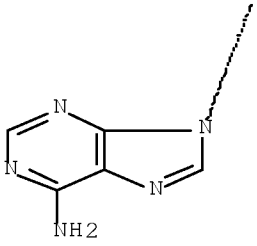




PAGE 4-A

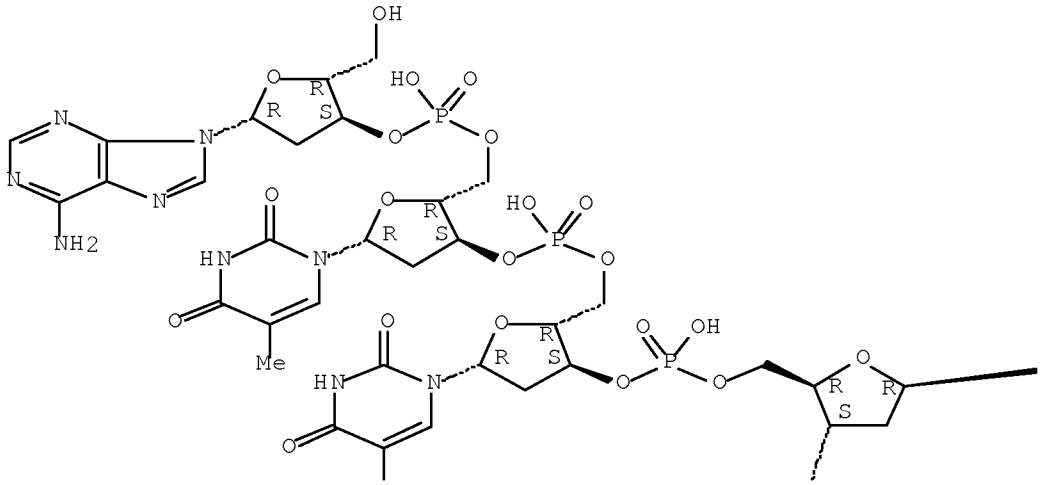
IT 870128-02-2 870128-04-4
(capture sequence; indirect labeling technol. for linear amplification of gene chip using biochemiluminescent nanospheres as high-load signal carriers)

RN 870128-02-2 HCAPLUS

CN Adenosine, 2'-deoxyadenylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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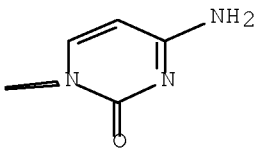

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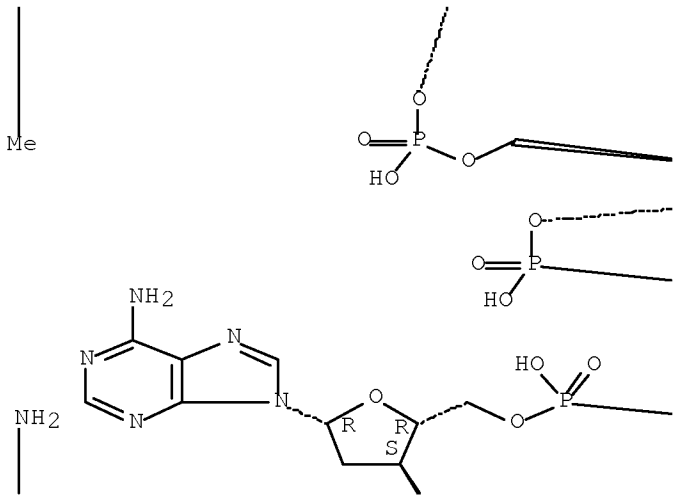

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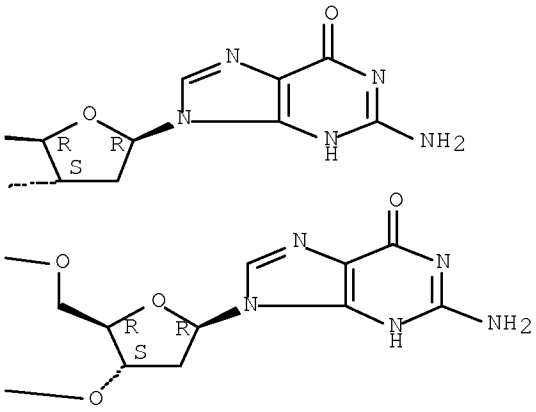

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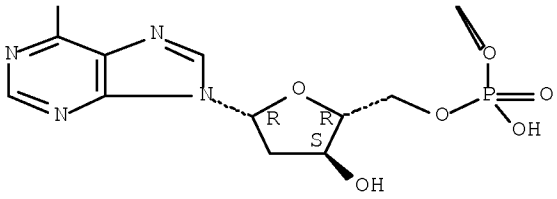


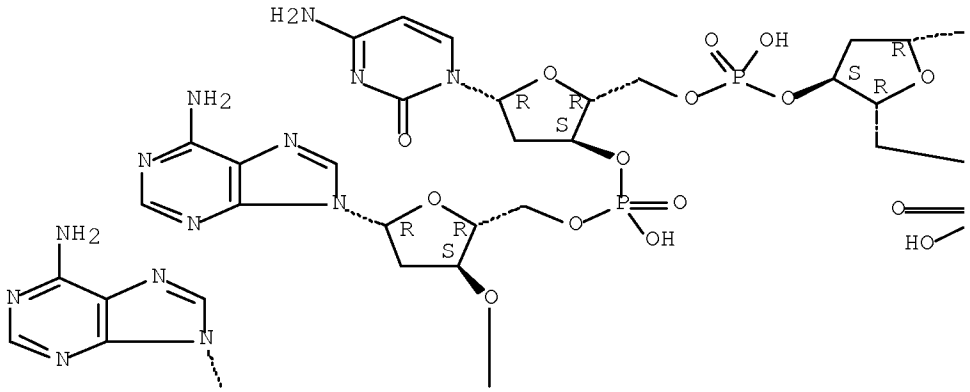
RN 870128-04-4 HCAPLUS

CN Thymidine, 2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-

2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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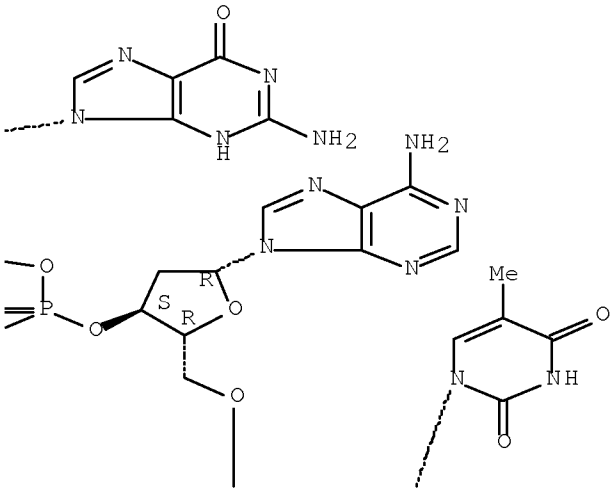
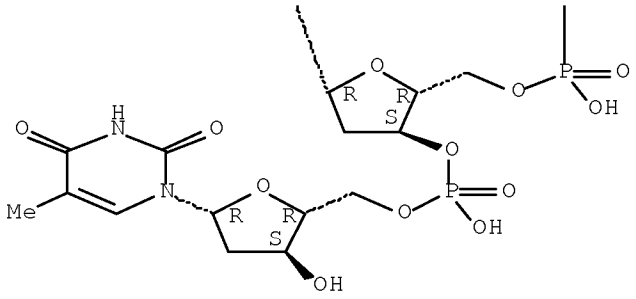
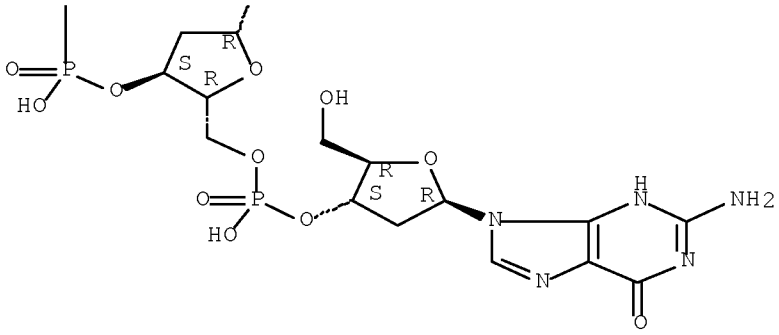


PAGE 2-A



PAGE 2-B



IPCI C12Q0001-68 [ICM,7]
IPCR C12Q0001-68 [I,C*]; C12Q0001-68 [I,A]
CC 3-1 (Biochemical Genetics)
Section cross-reference(s): 9
IT Affinity chromatography
Bioluminescence
Capillary electrochromatography
Capillary electrophoresis
Capillary isoelectric focusing
Capillary zone electrophoresis
Chemiluminescence
Electrokinetic chromatography
High-performance capillary electrophoresis
Isotachophoresis
Luminescence, electroluminescence
Micellar electrokinetic capillary chromatography
Size-exclusion chromatography
(anal. of labeling signal by; indirect labeling technol. for linear amplification of gene chip using biochemiluminescent nanospheres as high-load signal carriers)
IT Microspheres
(polyferrocene block copolymer, microsphere; indirect labeling technol. for linear amplification of gene chip using biochemiluminescent nanospheres as high-load signal carriers)
IT Microspheres

(polymetalcene block copolymer; indirect labeling technol. for linear amplification of gene chip using biochemiluminescent nanospheres as high-load signal carriers)

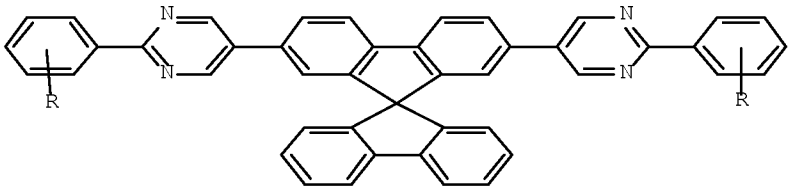
IT 870128-03-3
(acceptor sequence; indirect labeling technol. for linear amplification of gene chip using biochemiluminescent nanospheres as high-load signal carriers)

IT 870128-02-2 870128-04-4
(capture sequence; indirect labeling technol. for linear amplification of gene chip using biochemiluminescent nanospheres as high-load signal carriers)

L38 ANSWER 2 OF 15 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2004:609961 HCAPLUS Full-text
DOCUMENT NUMBER: 141:164549
TITLE: Pyrimidine spirobifluorene oligomer for organic light-emitting device
INVENTOR(S): Wong, Ken Tsung; Liao, Yuan Li; Wu, Chung Chih; Lin, Yu Ting; Chiang, Huo Hsien
PATENT ASSIGNEE(S): Echem Hightech Co., Ltd., Taiwan
SOURCE: U.S. Pat. Appl. Publ., 27 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040147742	A1	20040729	US 2004-759046 <--	20040120
US 6872824	B2	20050329		
TW 278503	B	20070411	TW 2003-92101646 <--	20030121
PRIORITY APPLN. INFO.:			TW 2003-92101646 A <--	20030121

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 141:164549
GI



I

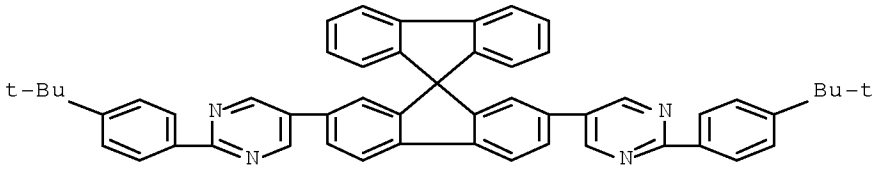
AB Fluorene-based pyrimidine-containing conjugated oligomers used in organic light-emitting devices are described by the general formula I (R = -OCnH2n+1 (n = 1-4), -C4H9, -C6H5, or H). The oligomers may be employed in organizing light- emitting devices as electron-transport emitting layers, emitting layers, a host in the emitting layers, electron transport layers, and hole-blocking layers.

IT 459216-40-1P 728911-50-0P 728911-51-1P

(pyrimidine spirobifluorene oligomers for organic light-emitting devices)

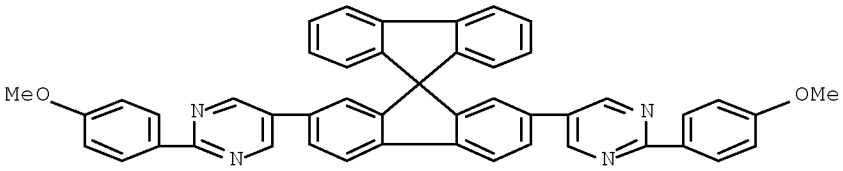
RN 459216-40-1 HCAPLUS

CN Pyrimidine, 5,5'-(9,9'-spirobi[9H-fluorene]-2,7-diyl)bis[2-[4-(1,1-dimethylethyl)phenyl]- (CA INDEX NAME)



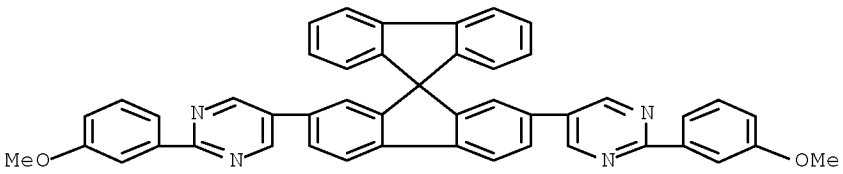
RN 728911-50-0 HCAPLUS

CN Pyrimidine, 5,5'-(9,9'-spirobi[9H-fluorene]-2,7-diyl)bis[2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 728911-51-1 HCAPLUS

CN Pyrimidine, 5,5'-(9,9'-spirobi[9H-fluorene]-2,7-diyl)bis[2-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)

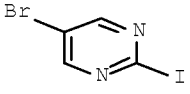


IT 183438-24-6, 5-Bromo-2-iodopyrimidine

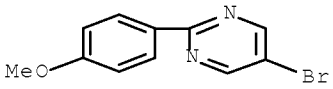
(pyrimidine spirobifluorene oligomers for organic light-emitting devices)

RN 183438-24-6 HCAPLUS

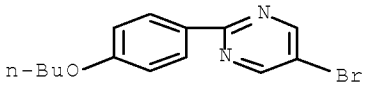
CN Pyrimidine, 5-bromo-2-iodo- (CA INDEX NAME)



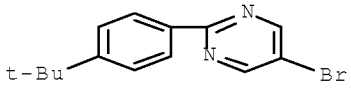
IT 177727-12-7P 406461-38-9P 406461-39-0P
728911-53-3P
(pyrimidine spirobifluorene oligomers for organic light-emitting devices)
RN 177727-12-7 HCAPLUS
CN Pyrimidine, 5-bromo-2-(4-methoxyphenyl)- (CA INDEX NAME)



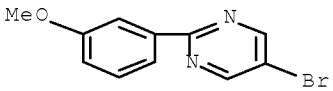
RN 406461-38-9 HCAPLUS
CN Pyrimidine, 5-bromo-2-(4-butoxyphenyl)- (CA INDEX NAME)



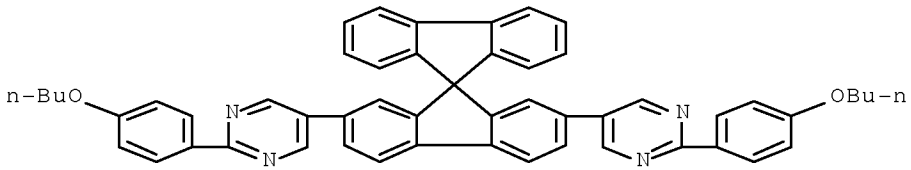
RN 406461-39-0 HCAPLUS
CN Pyrimidine, 5-bromo-2-[4-(1,1-dimethylethyl)phenyl]- (CA INDEX NAME)



RN 728911-53-3 HCAPLUS
CN Pyrimidine, 5-bromo-2-(3-methoxyphenyl)- (CA INDEX NAME)



IT 728911-49-7P
(zpyrimidine spirobifluorene oligomers for organic light-emitting devices)
RN 728911-49-7 HCAPLUS
CN Pyrimidine, 5,5'-(9,9'-spirobi[9H-fluorene]-2,7-diyl)bis[2-(4-butoxyphenyl)- (9CI) (CA INDEX NAME)



INCL 544230000
IPCI C07D0043-02 [ICM,7]
IPCR C07D0239-00 [I,C*]; C07D0239-26 [I,A]; C07D0403-00 [I,C*]; C07D0403-02 [I,A]; C09K0011-06 [I,C*]; C09K0011-06 [I,A]; H01L0051-00 [N,C*]; H01L0051-00 [N,A]; H01L0051-05 [N,C*]; H01L0051-30 [N,A]; H01L0051-50 [N,C*]; H01L0051-50 [N,A]
NCL 544/230.000; 544/294.000; 313/506.000
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 28, 76
ST pyrimidine spirobifluorene oligomer org light emitting device
IT Electroluminescent devices
(organic; pyrimidine spirobifluorene oligomers for organic light-emitting devices)
IT 459216-40-1P 728911-50-0P 728911-51-1P
(pyrimidine spirobifluorene oligomers for organic light-emitting devices)
IT 5720-07-0 10365-98-7 105365-51-3 123324-71-0
183438-24-6, 5-Bromo-2-iodopyrimidine 728911-52-2
(pyrimidine spirobifluorene oligomers for organic light-emitting devices)
IT 177727-12-7P 406461-38-9P 406461-39-0P
728911-53-3P
(pyrimidine spirobifluorene oligomers for organic light-emitting devices)
IT 728911-49-7P
(zpyrimidine spirobifluorene oligomers for organic light-emitting devices)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Wu	2002	81	577	Applied Physics Lett	HCAPLUS

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L38 ANSWER 3 OF 15 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2004:392507 HCAPLUS Full-text
DOCUMENT NUMBER: 140:407291
TITLE: Novel polymers for use in optical devices
INVENTOR(S): Craig, Michael Robert; Rogers, Jonathan; Schaefer, Thomas
PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.
SOURCE: PCT Int. Appl., 81 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004039864	A1	20040513	WO 2003-EP11634 <--	20031021
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2501692	A1	20040513	CA 2003-2501692 <--	20031021
AU 2003283284	A1	20040525	AU 2003-283284 <--	20031021
EP 1556435	A1	20050727	EP 2003-775209 <--	20031021
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003015854	A	20050920	BR 2003-15854 <--	20031021
CN 1708539	A	20051214	CN 2003-80102536 <--	20031021
CN 100415802	C	20080903		
JP 2006504862	T	20060209	JP 2005-501807 <--	20031021
TW 294905	B	20080321	TW 2003-92130088 <--	20031029
US 20060025564	A1	20060202	US 2005-531779 <--	20050419
US 7649077	B2	20100119		
MX 2005004423	A	20050726	MX 2005-4423 <--	20050426
IN 2005CN01069	A	20070907	IN 2005-CN1069 <--	20050530
IN 220932	A1	20080801		
PRIORITY APPLN. INFO.:			GB 2002-25244 A <--	20021030
			EP 2003-101113 A <--	20030423
			WO 2003-EP11634 W <--	20031021

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 140:407291

AB The present invention relates to polymers comprising diazine, especially pyrimidine, containing repeating units. Optical devices such as electroluminescent device or a photovoltaic device comprising the polymers of the present invention, can show significant advantages in color purity, device efficiency and/or operational lifetime. In addition, the polymers can have good solubility characteristics and relatively high glass transition temps., which facilitates their fabrication into coatings and films that are relatively thin, thermally stable, and relatively free of defects. Thus, heating 2,7-dibromo-9,9-dihexylfluorene with 2,6-bis(p-bromophenyl)-2-phenyl-

1,3-diazine in the presence of bis(1,5-cyclooctadiene)nickel and 2,2'-bipyridyl in anhydrous toluene at 80° for 17 h under an Ar atmospheric in the dark for 17 h then blocking with bromobenzene gave a copolymer.

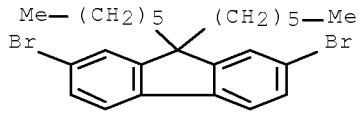
IT 289-95-2DP, Pyrimidine, polymers 688311-78-6DP, bromophenyl-blocked 688311-79-7DP, bromophenyl-blocked 688311-80-0P 688311-82-2DP, bromophenyl-blocked 688311-84-4P 688311-86-6DP, bromophenyl-blocked 688311-89-9DP, phenyl-terminated 688311-91-3DP, phenyl-terminated 688311-92-4P
(manufacture of diazine-containing polymers for use in optical devices)

RN 289-95-2 HCAPLUS
CN Pyrimidine (CA INDEX NAME)

RN 688311-78-6 HCAPLUS
CN Pyrimidine, 4,6-bis(4-bromophenyl)-2-phenyl-, polymer with 2,7-dibromo-9,9-dihexyl-9H-fluorene (9CI) (CA INDEX NAME)

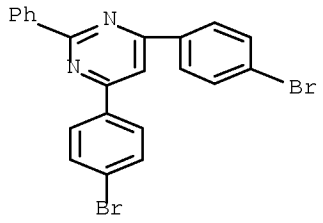
CM 1

CRN 189367-54-2
CMF C25 H32 Br2



CM 2

CRN 58536-47-3
CMF C22 H14 Br2 N2

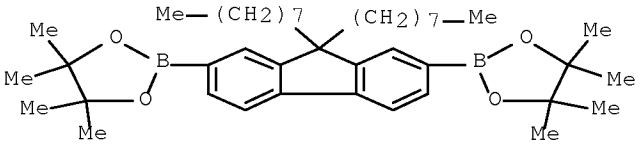


RN 688311-79-7 HCAPLUS

CN Pyrimidine, 4,6-bis(4-bromophenyl)-2-phenyl-, polymer with 2,2'-(9,9-dioctyl-9H-fluorene-2,7-diyl)bis[4,4,5,5-tetramethyl-1,3,2-dioxaborolane] (9CI) (CA INDEX NAME)

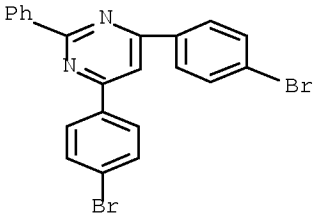
CM 1

CRN 196207-58-6
CMF C41 H64 B2 O4

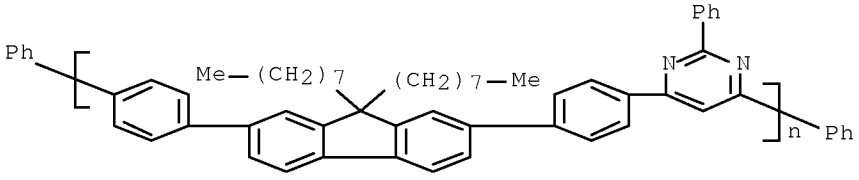


CM 2

CRN 58536-47-3
CMF C22 H14 Br2 N2



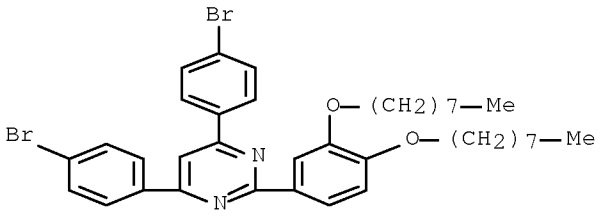
RN 688311-80-0 HCAPLUS
CN Poly[(2-phenyl-4,6-pyrimidinediyl)-1,4-phenylene(9,9-dioctyl-9H-fluorene-2,7-diyl)-1,4-phenylene], α,ω-diphenyl- (9CI) (CA INDEX NAME)



RN 688311-82-2 HCAPLUS
CN Pyrimidine, 2-[3,4-bis(octyloxy)phenyl]-4,6-bis(4-bromophenyl)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

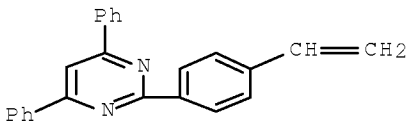
CRN 688311-81-1
CMF C38 H46 Br2 N2 O2



RN 688311-84-4 HCAPLUS
CN Pyrimidine, 2-(4-ethenylphenyl)-4,6-diphenyl-, homopolymer (CA INDEX NAME)

CM 1

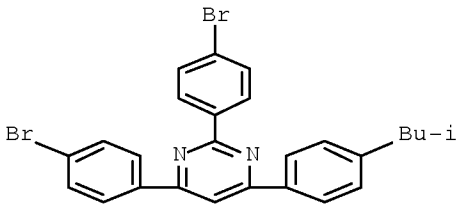
CRN 688311-83-3
CMF C24 H18 N2



RN 688311-86-6 HCAPLUS
CN Pyrimidine, 2,4-bis(4-bromophenyl)-6-[4-(2-methylpropyl)phenyl]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

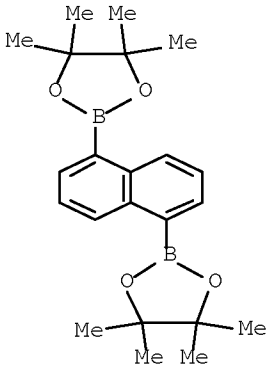
CRN 688311-85-5
CMF C26 H22 Br2 N2



RN 688311-89-9 HCAPLUS
CN Pyrimidine, 2,4-bis(4-bromophenyl)-6-(4-cyclohexylphenyl)-, polymer with 2,2'-(1,5-naphthalenediyl)bis[4,4,5,5-tetramethyl-1,3,2-dioxaborolane] (9CI) (CA INDEX NAME)

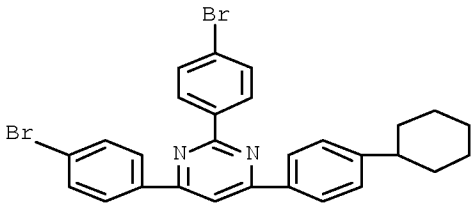
CM 1

CRN 688311-88-8
CMF C22 H30 B2 O4



CM 2

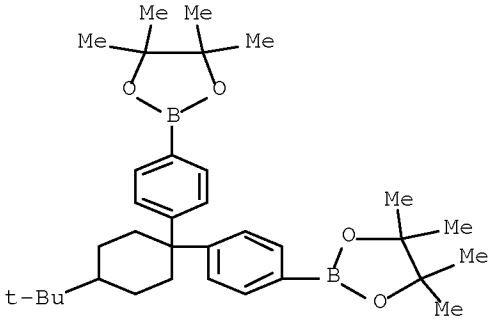
CRN 688311-87-7
CMF C28 H24 Br2 N2



RN 688311-91-3 HCAPLUS
CN Pyrimidine, 2,4-bis(4-bromophenyl)-6-(4-cyclohexylphenyl)-, polymer with 2,2'-[[4-(1,1-dimethylethyl)cyclohexylidene]di-4,1-phenylene]bis[4,4,5,5-tetramethyl-1,3,2-dioxaborolane] (9CI) (CA INDEX NAME)

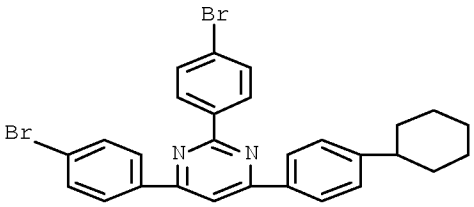
CM 1

CRN 688311-90-2
CMF C34 H50 B2 O4

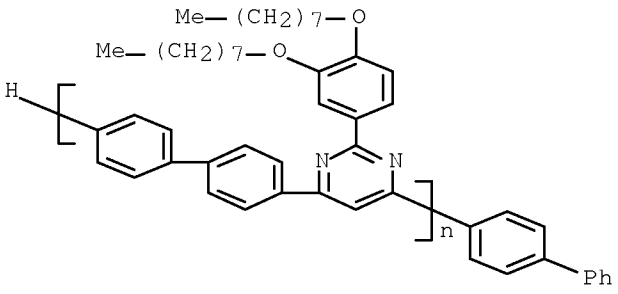


CM 2

CRN 688311-87-7
CMF C28 H24 Br2 N2



RN 688311-92-4 HCAPLUS
CN Poly[[2-[3,4-bis(octyloxy)phenyl]-4,6-pyrimidinediyl][1,1'-biphenyl]-4,4'-diyl], α-[1,1'-biphenyl]-4-yl-ω-hydro- (9CI) (CA INDEX NAME)



IPCI C08G0073-00 [ICM,7]; C08G0075-00 [ICS,7]; C08G0061-00 [ICS,7]; C08G0061-12 [ICS,7]; H01L0051-00 [ICS,7]; H01L0051-30 [ICS,7]; H01L0051-05 [ICS,7,C*]
IPCR C08G0061-00 [I,C*]; C08G0061-12 [I,A]; C08G0073-00 [I,C*]; C08G0073-06 [I,A]; C09K0011-06 [I,C*]; C09K0011-06 [I,A]; H01L0051-05 [I,C*];

H01L0051-30 [I,A]; H01L0051-50 [N,C*]; H01L0051-50 [N,A]; H05B0033-14 [I,C*]; H05B0033-14 [I,A]

CC 35-7 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 42, 73

IT Electroluminescent devices
Photoelectric devices
(manufacture of diazine-containing polymers for use in optical devices)

IT 289-95-2DP, Pyrimidine, polymers 688311-78-6DP, bromophenyl-blocked 688311-79-7DP, bromophenyl-blocked 688311-80-0P 688311-82-2DP, bromophenyl-blocked 688311-84-4P 688311-86-6DP, bromophenyl-blocked 688311-89-9DP, phenyl-terminated 688311-91-3DP, phenyl-terminated 688311-92-4P 688360-18-1P 688360-19-2P 688360-27-2P
(manufacture of diazine-containing polymers for use in optical devices)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Araki, K	2001			US 2001012572 A1	
Bajic, M	2001	6	477	MOLECULES	HCAPLUS
Covion Organic Semicond	2003			DE 10143353 A	HCAPLUS
Koton, M	1978	20	792	VYSOKOMOLEKULYARNYE	HCAPLUS
Vais, A	1975	6	144	IZV SIB OTD AKAD NAU	
Werner, S	1998			WO 9811150 A	HCAPLUS
Yup, K	1999			US 5876864 A	HCAPLUS

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

L38 ANSWER 4 OF 15 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2003:994627 HCAPLUS Full-text
DOCUMENT NUMBER: 140:177510
TITLE: Effects of saxitoxin (STX) and veratridine on bacterial Na+-K+ fluxes: A prokaryote-based STX bioassay
AUTHOR(S): Pomati, Francesco; Rossetti, Carlo; Calamari, Davide; Neilan, Brett A.
CORPORATE SOURCE: School of Biotechnology and Biomolecular Sciences, University of New South Wales, Sydney, 2052, Australia
SOURCE: Applied and Environmental Microbiology (2003), 69(12), 7371-7376
CODEN: AEMIDF; ISSN: 0099-2240
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English

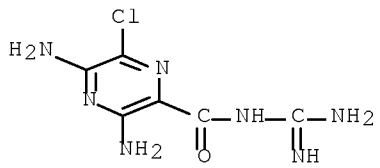
AB Saxitoxin (STX) is a potent natural sodium channel blocker and represents a significant health concern worldwide. We describe here the antagonistic effects of STX and veratridine (VTD), an Na+ channel activator, on three gram-neg. bacteria and their application to an STX bioassay. STX reduced the total cellular levels of both Na+ and K+, as measured by flame photometry, whereas VTD increased the cellular concns. relative to control ion fluxes in the cyanobacterium Cylindrospermopsis raciborskii AWT205. Endogenous STX production in toxic cyanobacterial strains of C. raciborskii and Anabaena circinalis prevented cell lysis induced by VTD stress. Microscopic cell counts showed that non-STX producing cyanobacteria displayed complete cell lysis and trichome fragmentation 5 to 8 h after addition of VTD and vanadate (VAN), an inhibitor of sodium pumps. The addition of STX, or its analog neoSTX, prior to treatment with VTD plus VAN prevented complete lysis in non-

STX-producing cyanobacteria. VTD also affected cyanobacterial metabolism, and the presence of exogenous STX in the sample also ameliorated this decrease in metabolic activity, as measured by the cellular conversion of tetrazolium into formazan. Reduced primary metabolism was also recorded as a decrease in the light emissions of Vibrio fischeri exposed to VTD. Addition of STX prior to VTD resulted in a rapid and dose-dependent response to the presence of the channel blocker, with samples exhibiting resistance to the VTD effect. Our findings demonstrate that STX and VTD influence bacterial Na+ and K+ fluxes in opposite ways, and these principles can be applied to the development of a prokaryote-based STX bioassay.

IT 2609-46-3, Amiloride
(effects of saxitoxin (STX) and veratridine on bacterial Na+-K+ fluxes as a basis fora prokaryote-based STX bioassay)

RN 2609-46-3 HCAPLUS

CN 2-Pyrazinecarboxamide, 3,5-diamino-N-(aminoiminomethyl)-6-chloro- (CA INDEX NAME)



CC 9-2 (Biochemical Methods)
Section cross-reference(s): 10

IT 71-62-5, Veratridine 137-58-6, Lidocaine 2609-46-3, Amiloride 14333-18-7 17341-25-2, biological studies 24203-36-9, biological studies 35523-89-8, Saxitoxin 64296-20-4, NeoSaxitoxin
(effects of saxitoxin (STX) and veratridine on bacterial Na+-K+ fluxes as a basis fora prokaryote-based STX bioassay)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Alam, M	1973	11	65	Toxicon	HCAPLUS
Allakhverdiev, S	2000	123	1047	Plant Physiol	HCAPLUS
Anderson, P	2001	129	17	Comp Biochem Physiol	MEDLINE
Baker, P	1993			Cyanobacterial bloom	
Carmichael, W	1997	63	3104	Appl Environ Microbi	HCAPLUS
Catteral, W	1973	70	3759	Proc Natl Acad Sci U	
Catteral, W	2001	294	2306	Science	
Catterall, W	1980	20	15	Annu Rev Pharmacol T	HCAPLUS
Eddy, M	2000	189	211	FEMS Microbiol Lett	HCAPLUS
Gallacher, S	1999	150	245	Protist	HCAPLUS
Glimmer, H	2000	51	1171	J Exp Botany	
Gorham, P	1964	15	796	Verh Int Verein Theo	
Hafer, J	1989	3	487	Mol Microbiol	HCAPLUS
Harada, K	1999		369	Toxic cyanobacteria	HCAPLUS
Harada, T	1982	46	1861	Agric Biol Chem	HCAPLUS
Hawkins, P	1997	35	341	Toxicon	HCAPLUS
Humpage, A	1994	45	761	Aust J Mar Freshwate	HCAPLUS
Kaas, H	2000	34	2089	Water Res	HCAPLUS
Kaneko, T	1996	3	741	DNA Res	
Lagos, N	1999	37	1359	Toxicon	HCAPLUS

Manger, R	1993	214	190	Anal Biochem	HCAPLUS
Murata, T	1996	271	10042	J Biol Chem	HCAPLUS
Nakamura, T	1998	180	3491	J Bacteriol	HCAPLUS
Oshima, Y	1987	25	1105	Toxicon	HCAPLUS
Pereira, P	2000	38	1689	Toxicon	HCAPLUS
Pomati, F	2000	36	553	J Phycol	HCAPLUS
Ren, D	2001	294	2372	Science	HCAPLUS
Shimizu, Y	1977		261	Marine natural produ	HCAPLUS
Shimojo, R	2000	154	1	Toxicology	HCAPLUS
Tisa, L	2000	182	4856	J Bacteriol	HCAPLUS
Zingone, A	2000	43	725	Ocean Coastal Manage	

OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

L38 ANSWER 5 OF 15 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2003:656269 HCAPLUS Full-text
DOCUMENT NUMBER: 139:204831
TITLE: Organic electroluminescent devices with light-emitting layer containing a phosphorescent compound and a host compound containing a boron atom in the molecule, and a display employing the organic electroluminescent devices
INVENTOR(S): Matsuura, Mitsunori; Yamada, Taketoshi; Kinoshita, Motoi; Kita, Hiroshi
PATENT ASSIGNEE(S): Konica Corporation, Japan
SOURCE: U.S. Pat. Appl. Publ., 26 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20030157366	A1	20030821	US 2002-281572 <--	20021028
US 6835473	B2	20041228		
JP 2003234192	A	20030822	JP 2002-334907 <--	20021119
JP 4300788	B2	20090722		
KR 915271	B1	20090903	KR 2002-76112 <--	20021203
JP 2008227512	A	20080925	JP 2008-71202 <--	20080319
PRIORITY APPLN. INFO.:			JP 2001-372601 A <--	20011206
			JP 2002-334907 A3 <--	20021119

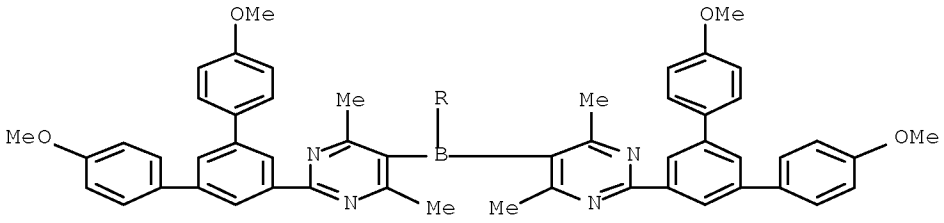
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 139:204831
AB Organic electroluminescent devices and a display employing the organic electroluminescent devices are described which comprise a light-emitting layer containing a phosphorescent compound and a host compound containing a boron atom in the mol.
IT 583040-37-3
(host in light-emitting layer; organic electroluminescent devices with light-emitting layer containing phosphorescent compound and host compound containing boron atom in mol., and display employing

electroluminescent devices)

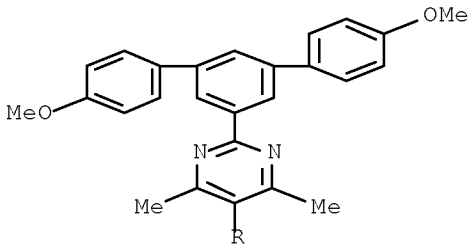
RN 583040-37-3 HCAPLUS

CN Pyrimidine, 5,5',5''-borylidynetris[2-(4,4''-dimethoxy[1,1':3',1''-terphenyl]-5'-yl)-4,6-dimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



INCL 428690000; 428917000; 313504000; 257102000; 257103000

IPCI H05B0033-14 [ICM,7]

IPCR C09K0011-06 [I,C*]; C09K0011-06 [I,A]; H01L0051-00 [I,C*]; H01L0051-00 [I,A]; H01L0051-05 [I,C*]; H01L0051-30 [I,A]; H01L0051-50 [I,C*]; H01L0051-50 [I,A]; C09K0011-77 [I,C*]; C09K0011-77 [I,A]

NCL 428/690.000; 257/102.000; 257/103.000; 313/504.000; 428/917.000

CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 22, 74, 76

ST org electroluminescent device display boron host phosphorescent

IT Optical imaging devices
(color, full color display; organic electroluminescent devices with light-emitting layer containing phosphorescent compound and host compound containing boron atom in mol., and display employing electroluminescent devices)

IT Electroluminescent devices
(displays; organic electroluminescent devices with light-emitting layer containing phosphorescent compound and host compound containing boron atom in mol., and display employing electroluminescent devices)

IT Luminescent screens
(electroluminescent; organic electroluminescent devices with light-emitting layer containing phosphorescent compound and host compound containing boron atom in mol., and display employing electroluminescent devices)

IT Phosphorescent substances
(organic electroluminescent devices with light-emitting layer containing phosphorescent compound and host compound containing boron atom in mol., and display employing electroluminescent devices)
IT Platinum-group metal complexes
(osmium, iridium, platinum; organic electroluminescent devices with light-emitting layer containing phosphorescent compound and host compound containing boron atom in mol., and display employing electroluminescent devices)
IT Electroluminescent devices
(phosphorescent; organic electroluminescent devices with light-emitting layer containing phosphorescent compound and host compound containing boron atom in mol., and display employing electroluminescent devices)
IT 4733-39-5, Bathocuproine
(electron-transporting and hole-blocking layer; organic electroluminescent devices with light-emitting layer containing phosphorescent compound and host compound containing boron atom in mol., and display employing electroluminescent devices)
IT 2085-33-8, Aluminum tris(8-hydroxyquinolinato)
(electron-transporting layer; organic electroluminescent devices with light-emitting layer containing phosphorescent compound and host compound containing boron atom in mol., and display employing electroluminescent devices)
IT 123847-85-8, α-NPD
(hole-transporting layer; organic electroluminescent devices with light-emitting layer containing phosphorescent compound and host compound containing boron atom in mol., and display employing electroluminescent devices)
IT 38186-32-2 213621-16-0 300823-56-7 300823-57-8 301300-11-8
332350-52-4 332350-53-5 492434-53-4 492446-94-3 492446-97-6
492447-00-4 583040-29-3 583040-30-6 583040-31-7 583040-32-8
583040-33-9 583040-34-0 583040-35-1 583040-36-2
583040-37-3 583040-38-4 583040-39-5 583040-40-8
583040-41-9 583040-42-0
(host in light-emitting layer; organic electroluminescent devices with light-emitting layer containing phosphorescent compound and host compound containing boron atom in mol., and display employing electroluminescent devices)
IT 7440-42-8D, Boron, compds.
(organic electroluminescent devices with light-emitting layer containing phosphorescent compound and host compound containing boron atom in mol., and display employing electroluminescent devices)
IT 94928-86-6 343978-79-0 376367-93-0
(phosphorescent dopant; organic electroluminescent devices with light-emitting layer containing phosphorescent compound and host compound containing boron atom in mol., and display employing electroluminescent devices)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon	1997			EP 775706	HCAPLUS
Anon	1998			EP WO9836035	
Anon	2000			JP 2000290645	HCAPLUS
Anon	2001			EP 1142895	HCAPLUS

Arai	2001		US 6262433 B1	HCAPLUS
Baldo	2000		US 6097147 A	HCAPLUS
Li	2002		US 6372154 B1	HCAPLUS
Matsuo	2002		US 6391482 B1	HCAPLUS
Sato	2003		US 6534202 B2	HCAPLUS
Tang	1995		US 5409783 A	HCAPLUS
Thompson	2003		US 6579632 B2	HCAPLUS

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

L38 ANSWER 6 OF 15 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2003:614576 HCAPLUS Full-text
DOCUMENT NUMBER: 139:298685
TITLE: A search for interstellar pyrimidine
AUTHOR(S): Kuan, Yi-Jehng; Yan, Chi-Hung; Charnley, Steven B.; Kisiel, Zbigniew; Ehrenfreund, Pascale; Huang, Hui-Chun
CORPORATE SOURCE: Department of Earth Sciences, National Taiwan Normal University, Taipei, 116, Taiwan
SOURCE: Los Alamos National Laboratory, Preprint Archive, Astrophysics (2003) 1-8, arXiv:astro-ph/0308116, 7 Aug 2003
CODEN: LNASFZ
URL: http://xxx.lanl.gov/pdf/astro-ph/0308116
PUBLISHER: Los Alamos National Laboratory
DOCUMENT TYPE: Preprint
LANGUAGE: English

AB We have searched 3 hot mol. cores for submillimeter emission from the nucleic acid building-block pyrimidine. We obtain upper limits to the total pyrimidine (beam-averaged) column densities towards Sgr B2(N), Orion KL, and W51 e1/e2 of 1.7 x 1014 cm-2, 2.4 x 1014 cm2, and 3.4 x 1014 cm2, resp. The associated upper limits to the pyrimidine fractional abundances lie in the range (0.3-3) x 10-10. Implications of this result for interstellar organic chemical, and for the prospects of detecting N heterocycles in general, are briefly discussed.

IT 289-95-2, Pyrimidine
(search for interstellar pyrimidine)
RN 289-95-2 HCAPLUS
CN Pyrimidine (CA INDEX NAME)

CC 73-9 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
IT 289-95-2, Pyrimidine
(search for interstellar pyrimidine)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Allamandola, L	1997		23	Astronomical & Bioch	HCAPLUS
Blake, G	1987	315	621	ApJ	HCAPLUS
Cernicharo, J	2001	546	L123	ApJL	HCAPLUS
Cernicharo, J	2001	546	L127	ApJL	HCAPLUS

Charnley, S	2001	57	685	Spectrochimica Acta	MEDLINE
Cherchneff, I	1992	401	269	ApJ	HCAPLUS
Chyba, C	1990	249	366	Sci	HCAPLUS
Dickens, J	1997	489	753	ApJ	HCAPLUS
Dickens, J	2001	57	643	Spectrochimica Acta	MEDLINE
Ehrenfreund, P	2000	38	429	ARA&A	
Ehrenfreund, P	2002	65	1427	Reports on Progress	HCAPLUS
Greenberg, J	2000	531	71	ApJ	
Hollis, J	2000	540	L107	ApJ	HCAPLUS
Irvine, W	1981	97	192	A&A	HCAPLUS
Jaffe, D	1984	279	L51	ApJL	HCAPLUS
Kisiel, Z	1999	195	332	J Mol Spectrosc	HCAPLUS
Kisiel, Z	2003	217	115	J Mol Spectrosc	HCAPLUS
Krueger, F	1991	56	167	Space Sci Rev	
Kuan, Y	2003		257	the proceedings of t	
Kuan, Y	2003			tp appear in the Aug	
Miao, Y	1995	445	L59	ApJ	HCAPLUS
Myers, P	1980	241	155	ApJ	HCAPLUS
Nummelin, A	1998	337	275	A&A	HCAPLUS
Nummelin, A	1999	341	L59	A&A	HCAPLUS
Nummelin, A	2000	128	213	ApJS	HCAPLUS
Peeter, Z	2003			A&A, submitted	
Remijan, A	2002	576	264	ApJ	HCAPLUS
Ricci, A	2001	154	516	Icarus	
Schilke, P	1997	108	301	ApJS	HCAPLUS
Simon, M	1973	184	757	ApJ	HCAPLUS
Stoks, P	1981	45	563	Geochim Cosmochim Ac	HCAPLUS
Stoks, P	1982	46	309	Geochim Cosmochim Ac	HCAPLUS
Sutton, E	1995	97	455	ApJS	HCAPLUS
Turner, B	1991	76	617	ApJS	HCAPLUS
Woods, P	2003	402	189	A&A	HCAPLUS
Woods, P	2002	574	L167	ApJL	HCAPLUS
Ziurys, L	1986	300	L19	ApJL	HCAPLUS

L38 ANSWER 7 OF 15 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2003:221911 HCAPLUS Full-text
DOCUMENT NUMBER: 138:251130
TITLE: Method and system for classifying a scenario
INVENTOR(S): Chaplen, Frank W. R.; Gerwick, William H.; Jovanovic, Goran; Kolodziej, Wojtek J.; Liburdy, Jim; McFadden, Phil; Paul, Brian K.; Plant, Thomas K.; Trempy, Janine E.; Willard, Corwin; Pacut, Andrzej; Upson, Rosalyn H.; Roussel, Nicolas
PATENT ASSIGNEE(S): Oregon State University, USA
SOURCE: PCT Int. Appl., 193 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003023366	A2	20030320	WO 2002-US29085 <--	20020912
WO 2003023366	A3	20031127		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,

NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002336504	A1	20030324	AU 2002-336504 <--		20020912
US 20050074834	A1	20050407	US 2004-801389 <--		20040312
PRIORITY APPLN. INFO.:			US 2001-322004P <--	P	20010912
			WO 2002-US29085 <--	W	20020912

AB Living cells can be used to identify or quantify bioactive conditions, including without limitation, chems., biol. pathogens, and environmental conditions, such as pH, in samples based on changes in, for example, cell color, morphol. and/or physiol. Such changes can be directly detected or detected with the aid of instrumentation. One embodiment of the method comprises exposing a system to a bioactive condition, such as a chemical agent, a biol. pathogen, an environmental condition, such as pH, etc., and combinations of such conditions. The system then exhibits a response to the bioactive condition. The response of the system, or a portion thereof, to the bioactive condition is then represented, such as by digital images. The method then involves attempting to classify a scenario by database comparison. Classification can be in terms of numeric or non-numerical classifiers. Typically, the system comprises living cells. Living cells useful for practicing the method experience a detectable change in response to an interaction with a bioactive condition. A likely living cell for use with the method and apparatus of the present invention is a chromatophore. The present method has a number of uses, including classifying unknown drug candidates, classifying unknown toxins, classifying chemical warfare agents, etc. The method a can be implemented using a computer program encoding the method. Moreover, a computer-readable medium is described on which is stored a computer program having instructions for executing the method. A cytosensor apparatus also is described. Betta chromatophores were isolated and used in cytosensors to detect biol. toxins in food and water, a calcium ion channel in erythrophores, and other agents. A two-cell cytosensor containing chromatophores and a small inoculum of a selected microbial cell was used to test potential antibiotics.

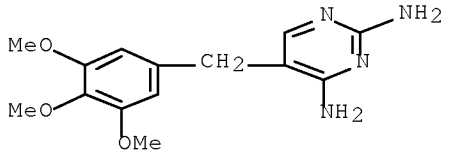
IT 8064-90-2
(chromatophore response to; method and system for classifying scenarios with cell responses and computers)

RN 8064-90-2 HCAPLUS

CN Benzenesulfonamide, 4-amino-N-(5-methyl-3-isoxazolyl)-, mixt. with 5-[(3,4,5-trimethoxyphenyl)methyl]-2,4-pyrimidinediamine (CA INDEX NAME)

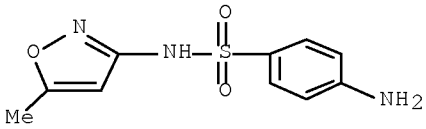
CM 1

CRN 738-70-5
CMF C14 H18 N4 O3



CM 2

CRN 723-46-6
CMF C10 H11 N3 O3 S



IPCI G01N [ICM,7]
IPCR G01N0015-14 [I,C*]; G01N0015-14 [I,A]; G06K0009-62 [I,C*]; G06K0009-62 [I,A]; G06K0009-68 [I,C*]; G06K0009-68 [I,A]
CC 9-16 (Biochemical Methods)
Section cross-reference(s): 1, 4, 6, 17, 61
IT Calcium channel blockers
(L-type, erythrophore response to norepinephrine and calcium ion and; method and system for classifying scenarios with cell responses and computers)
IT Calcium channel
(L-type, norepinephrine and channel blockers and calcium ion effect on erythrophore; method and system for classifying scenarios with cell responses and computers)
IT Algorithm
Animal tissue
Animal tissue culture
Apparatus
Betta splendens
Bioassay
Body fluid
CCD cameras
Cell
Cell immortalization
Cell migration
Chemicals
Chromatophore, animal cell
Classification
Cluster analysis
Computer program
Computers
DNA microarray technology
Databases
Drug screening
Electroluminescent devices
Environment
Flow
Fluids
Food analysis
Gas chromatography
Gel electrophoresis
HeLa cell

Human
Immunoassay
Immunoblotting
Immunoprecipitation
Information systems
Light
Liquid chromatography
Mammalia
Mass spectrometry
Metabolism
Microorganism
NMR spectroscopy
Optical refraction
Pathogen
Pharmaceutical analysis
Plant tissue
Redox reaction
Samples
Secretion (process)
Semiconductor nanostructures
Signal transduction, biological
Simulation and Modeling
Temperature
Test kits
Turbidity
UV radiation
pH
(method and system for classifying scenarios with cell responses and computers)

IT Calcium channel
(norepinephrine and channel blockers and calcium ion effect on erythrophore; method and system for classifying scenarios with cell responses and computers)

IT 52-53-9, Verapamil 21829-25-4, Nifedipine 42399-41-7, Diltiazem 66085-59-4, Nimodipine
(calcium channel blocker, effect on pigment transport in erythrophores pretreated with norepinephrine; method and system for classifying scenarios with cell responses and computers)

IT 50-00-0, Formaldehyde, biological studies 50-23-7, Hydrocortisone 50-36-2, Cocaine 50-37-3, Lysergic acid diethylamide 50-47-5, Desipramine 50-49-7, Imipramine 50-60-2, Phentolamine 51-45-6, Histamine, biological studies 51-83-2, Carbachol 51-84-3, Acetylcholine, biological studies 54-05-7, Chloroquine 54-11-5, Nicotine 55-65-2, Guanethidine 56-55-3, 1,2-Benzanthracene 56-65-5, 5'-ATP, biological studies 57-12-5, Cyanide, biological studies 57-92-1, Streptomycin, biological studies 58-82-2, Bradykinin 59-96-1, Phenoxybenzamine 60-54-8, Tetracycline 60-92-4, CAMP 61-33-6, biological studies 64-86-8, Colchicine 69-72-7, biological studies 83-32-9, Acenaphthene 84-22-0, Tetrahydrozoline 86-21-5, Pheniramine 129-00-0, Pyrene, biological studies 146-48-5, Yohimbine 206-44-0, Fluoranthene 300-62-9, Amphetamine 389-08-2, Nalidixic acid 404-86-4, Capsaicin 443-48-1, Metronidazole 804-63-7, Quinine sulfate 835-31-4, Naphazoline 886-86-2, Tricaine 1397-89-3, Amphotericin B 1406-05-9, Penicillin 1491-59-4, Oxymetazoline 4205-90-7, Clonidine 7439-92-1, Lead, biological studies 7440-02-0, Nickel, biological studies 7440-22-4, Silver, biological studies 7440-43-9, Cadmium, biological studies 7440-50-8, Copper, biological studies 7722-84-1, Hydrogen peroxide, biological studies 7783-06-4, Hydrogen sulfide, biological studies 8064-90-2

14798-03-9, Ammonium, biological studies 22144-77-0, Cytochalasin D 33507-63-0, Substance P 83002-04-4, CP-55940 84478-11-5, Protein kinase inhibitor H-8 95536-59-7, Latrotoxin 117630-06-5, ω-Conotoxin
(chromatophore response to; method and system for classifying scenarios with cell responses and computers)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon				US 4401755 A	
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Anon				US 5919646 A	HCAPLUS
Anon				US 5998212 A	

L38 ANSWER 8 OF 15 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2002:73520 HCAPLUS Full-text
DOCUMENT NUMBER: 136:376999
TITLE: New electron-transporting materials for light emitting diodes: 1,3,4-oxadiazole-pyridine and 1,3,4-oxadiazole-pyrimidine hybrids
AUTHOR(S): Wang, Changsheng; Jung, Gun-Young; Batsanov, Andrei S.; Bryce, Martin R.; Petty, Michael C.
CORPORATE SOURCE: Department of Chemistry, University of Durham, Durham, DH1 3LE, UK
SOURCE: Journal of Materials Chemistry (2002), 12(2), 173-180
CODEN: JMACEP; ISSN: 0959-9428
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The authors describe the synthesis of three new isomeric 1,3,4-oxadiazole-pyridine hybrids, namely: 2,6-, 3,5- and 2,4-bis[2-(4-tert-butylphenyl)-1,3,4-oxadiazol-5-yl]pyridine, (PDPy-2,6, PDPy-3,5 and PDPy-2,4, resp.) and a 1,3,4-oxadiazole-pyrimidine hybrid, namely: 2,5-bis[2-(4-tert-butylphenyl)-1,3,4-oxadiazol-5-yl]pyrimidine (PDPmDP). The x-ray crystal structures are reported for PDPy-2,4 and the known phenylene analog 1,3-bis[2-(4-tert-butylphenyl)-1,3,4- oxadiazol-5-yl]benzene (OXD-7) as a 1:1 toluene solvate. The packing motif for mols. of both PDPy-2,4 and OXD-7 is that of discrete layers with the mean planes of all the mols. in the crystals parallel to within 6°. The authors have fabricated light- emitting diodes (LEDs) using poly[2-methoxy-5-(2-ethylhexyloxy)-1,4-phenylenevinylene] (MEH-PPV) doped with rubrene as the emissive material, with and without a thermally evaporated electron conducting/hole-blocking (ECHB) layer of PDPy-2,6, PDPy-3,5 and PDPy-2,4, PDPmDP and OXD-7, in the device configuration ITO/MEH-PPV(Ru)/ECHB layer/Al. Electroluminescence spectra indicate that light is emitted only from the MEH-PPV layer. The bilayer LEDs are considerably more efficient than single layer devices, e.g. the external quantum efficiencies of devices incorporating PDPy-2,6, PDPy-3,5 and OXD-7 are 0.14, 0.04 and 0.06% at 40 mA m-2, resp., cf. 0.007% for the reference single-layer MEH-PPV(Ru) device. There is no clear correlation between exptl. EQE values and the PM3 calculated LUMO levels of the materials.

IT 423919-25-9P
(new electron-transporting materials for light emitting diodes based on 1,3,4-oxadiazole-pyridine and 1,3,4-oxadiazole-pyrimidine hybrids)

RN 423919-25-9 HCAPLUS
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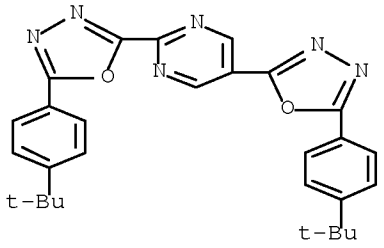

IT 423925-09-1P
(new electron-transporting materials for light emitting diodes based on 1,3,4-oxadiazole-pyridine and 1,3,4-oxadiazole-pyrimidine hybrids)
RN 423925-09-1 HCAPLUS
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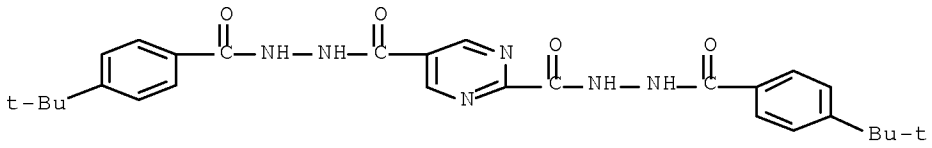
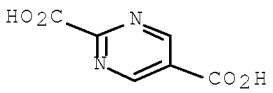


IT 127527-24-6P, 2,5-Pyrimidinedicarboxylic acid
423924-00-9P 423924-41-8P
(new electron-transporting materials for light emitting diodes based on 1,3,4-oxadiazole-pyridine and 1,3,4-oxadiazole-pyrimidine hybrids)
RN 127527-24-6 HCAPLUS
CN 2,5-Pyrimidinedicarboxylic acid (CA INDEX NAME)



RN 423924-00-9 HCAPLUS
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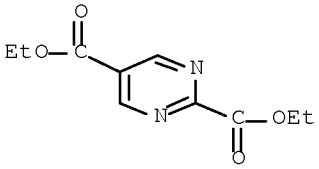
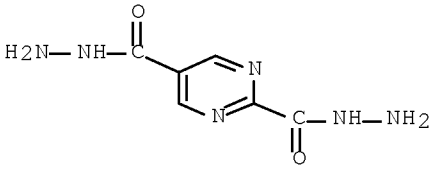
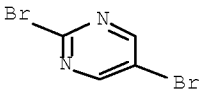


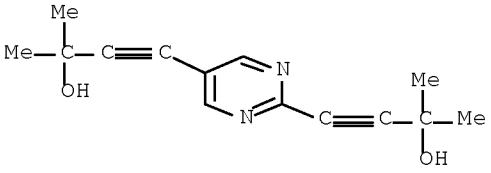
RN 423924-41-8 HCAPLUS
CN 2,5-Pyrimidinedicarboxylic acid, 2,5-dihydrazide (CA INDEX NAME)



IT 32779-37-6 423922-92-3
(new electron-transporting materials for light emitting diodes based on 1,3,4-oxadiazole-pyridine and 1,3,4-oxadiazole-pyrimidine hybrids)
RN 32779-37-6 HCAPLUS
CN Pyrimidine, 2,5-dibromo- (CA INDEX NAME)



RN 423922-92-3 HCAPLUS
CN 3-Butyn-2-ol, 4,4'-(2,5-pyrimidinediyl)bis[2-methyl- (9CI) (CA INDEX NAME)



CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 22, 75, 76
IT Crystal structure

Electroluminescent devices
Luminescence, electroluminescence
UV and visible spectra
(new electron-transporting materials for light emitting diodes based on 1,3,4-oxadiazole-pyridine and 1,3,4-oxadiazole-pyrimidine hybrids)

IT 7429-90-5, Aluminum, uses 7440-18-8, Ruthenium, uses 50926-11-9, Indium tin oxide
(new electron-transporting materials for light emitting diodes based on 1,3,4-oxadiazole-pyridine and 1,3,4-oxadiazole-pyrimidine hybrids)

IT 309287-20-5P 423917-55-9P 423918-40-5P 423919-25-9P
(new electron-transporting materials for light emitting diodes based on 1,3,4-oxadiazole-pyridine and 1,3,4-oxadiazole-pyrimidine hybrids)

IT 517-51-1, Rubrene 138184-36-8, Poly[2-methoxy-5-(2-ethylhexyloxy)-1,4-phenylenevinylene] 138372-67-5
(new electron-transporting materials for light emitting diodes based on 1,3,4-oxadiazole-pyridine and 1,3,4-oxadiazole-pyrimidine hybrids)

IT 423925-09-1P
(new electron-transporting materials for light emitting diodes based on 1,3,4-oxadiazole-pyridine and 1,3,4-oxadiazole-pyrimidine hybrids)

IT 127527-24-6P, 2,5-Pyrimidinedicarboxylic acid 423924-00-9P 423924-41-8P
(new electron-transporting materials for light emitting diodes based on 1,3,4-oxadiazole-pyridine and 1,3,4-oxadiazole-pyrimidine hybrids)

IT 115-19-5 1710-98-1 32779-37-6 61843-06-9 341972-57-4 423922-92-3
(new electron-transporting materials for light emitting diodes based on 1,3,4-oxadiazole-pyridine and 1,3,4-oxadiazole-pyrimidine hybrids)

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Li, X	1995	7	898	Adv Mater	HCAPLUS
Mitschke, U	1998	4	2211	Chem Eur J	HCAPLUS
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Pan, J	1988	9	41	Gaodeng Xuexiao Huax	HCAPLUS
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Schultz, B	1997	9	601	Adv Mater	
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Thelakkat, M	1998	9	429	Polym Adv Technol	HCAPLUS
Wang, C	2001	11	47	Adv Funct Mater	HCAPLUS
Wang, C	2000	12	217	Adv Mater	HCAPLUS
Wang, C	2001	13	1167	Chem Mater	HCAPLUS
Windscheif, P	1994		87	Synthesis	HCAPLUS
Zhang, X	1999	32	7422	Macromolecules	HCAPLUS

OS.CITING REF COUNT: 44 THERE ARE 44 CAPLUS RECORDS THAT CITE THIS RECORD (44 CITINGS)

L38 ANSWER 9 OF 15 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2001:630846 HCAPLUS Full-text
DOCUMENT NUMBER: 135:206411
TITLE: Identification of high affinity nucleic acid ligands to lectins by SELEX
INVENTOR(S): Parma, David H.; Hicke, Brian; Bridonneau, Philippe; Gold, Larry
PATENT ASSIGNEE(S): Gilead Sciences, Inc., USA
SOURCE: U.S., 180 pp., Cont.-in-part of U.S. 5,780,228. CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 129
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6280932	B1	20010828	US 1997-952793 <--	19971121
US 5475096	A	19951212	US 1991-714131 <--	19910610
EP 786469	A2	19970730	EP 1997-200035 <--	19910610
EP 786469	B1	20060301		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
EP 1493825	A2	20050105	EP 2004-17602 <--	19910610
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EP 1695978	A1	20060830	EP 2005-27853 <--	19910610
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IL 112141	A	19980405	IL 1991-112141 <--	19910611
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AU 773741	B2	20040603	AU 2001-18257	20010202
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AU 2004-242462 A3 20041223

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB This invention discloses high-affinity oligonucleotide ligands to lectins, specifically nucleic acid ligands having the ability to bind to the lectins, wheat germ agglutinin, L-selectin and P-selectin. Also disclosed are the methods for obtaining such ligands. Ligands were obtained by SELEX. Characterization of binding behavior and the effects of backbone modification on ligand interaction with lectins are reported.

IT 186183-99-3 186184-00-9 357383-58-5
357383-60-9 357383-61-0
(nucleotide sequence, ligand for L-selectin; identification of high affinity nucleic acid ligands to lectins by SELEX)

RN 186183-99-3 HCAPLUS

CN Thymidine, 2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-

(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-
(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-
(3'→5')-2'-deoxyguanylyl-(3'→5')- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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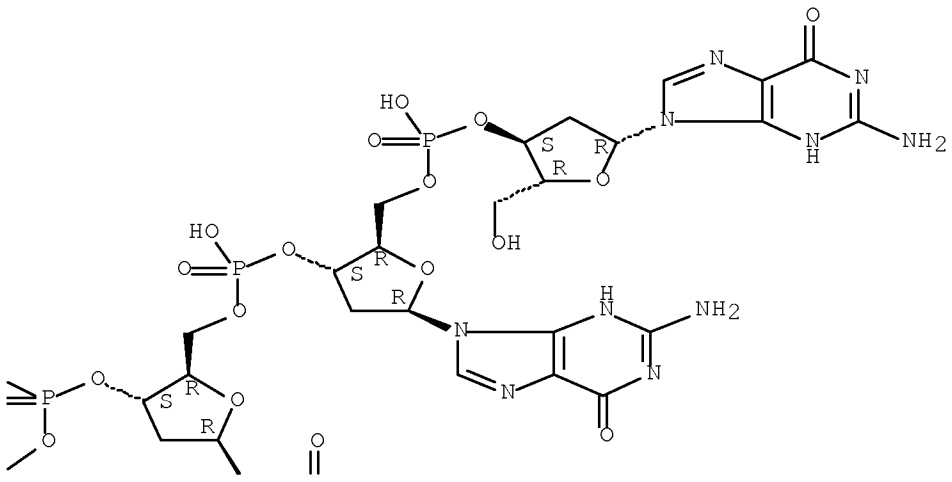
PAGE 1-B



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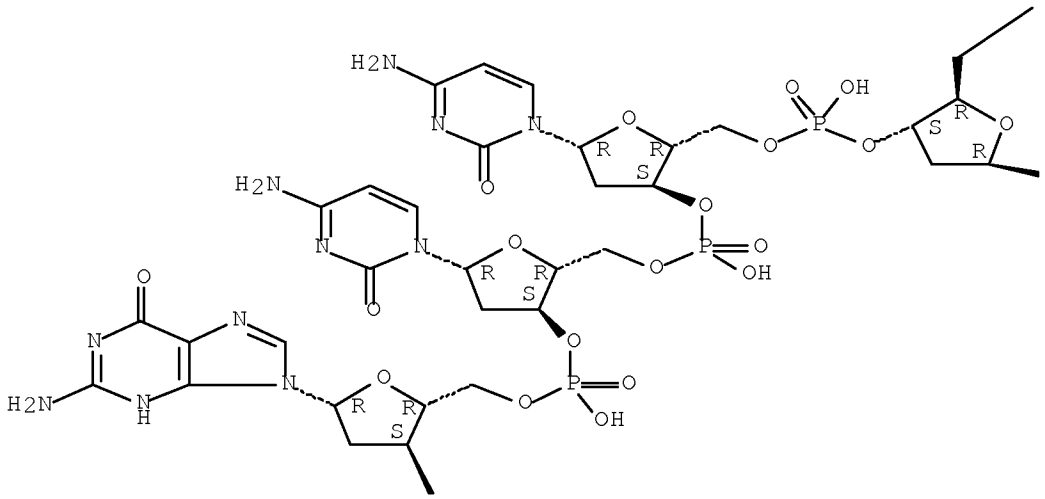

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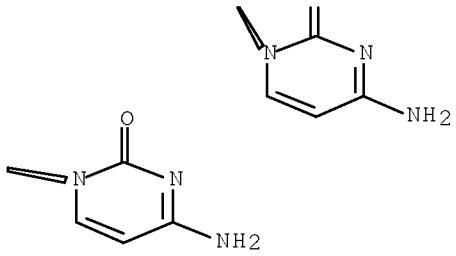

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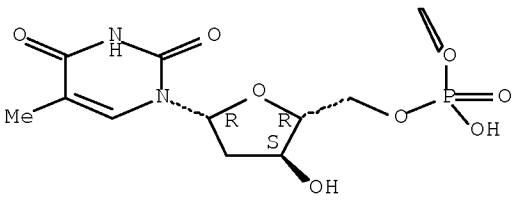
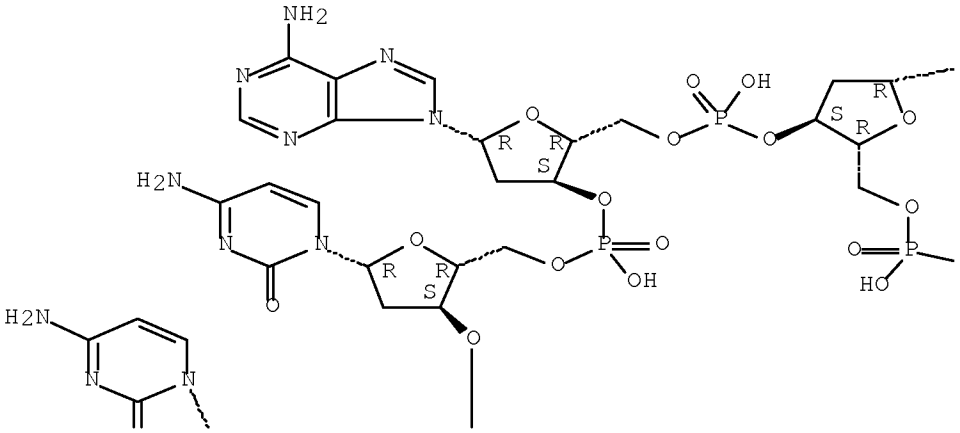


RN 186184-00-9 HCAPLUS

CN Thymidine, 2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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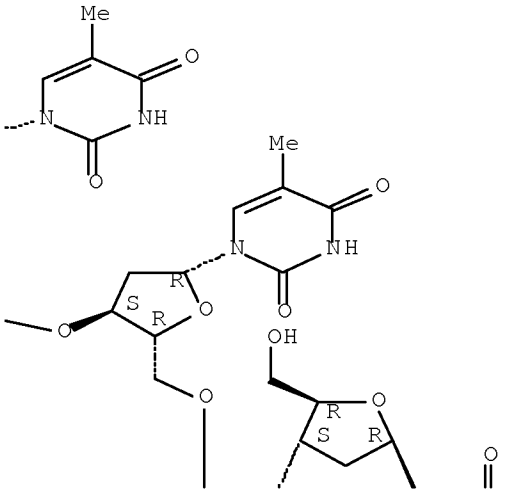

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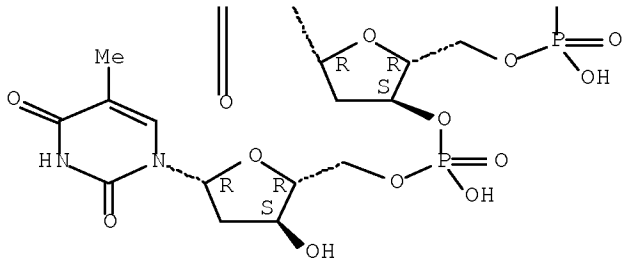


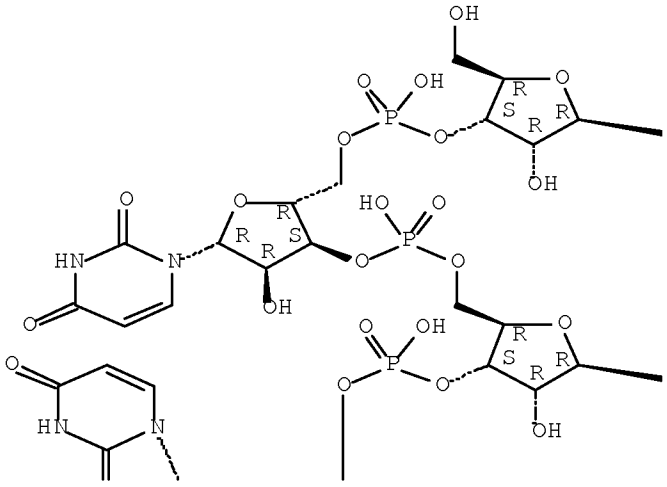
PAGE 2-B

RN 357383-58-5 HCAPLUS

CN Adenosine, adenylyl-(3'→5')-uridylyl-(3'→5')-guanylyl-(3'→5')-uridylyl-(3'→5')-guanylyl-(3'→5')-uridylyl-(3'→5')-guanylyl-(3'→5')- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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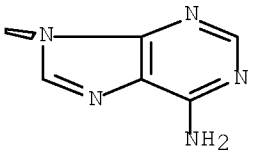

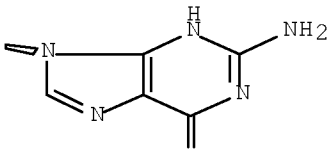

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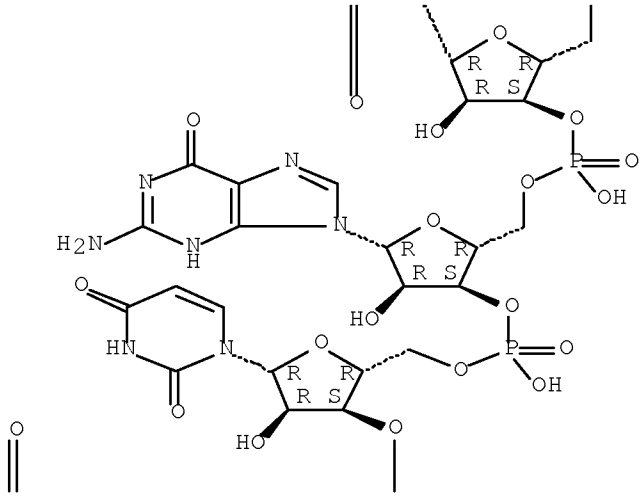
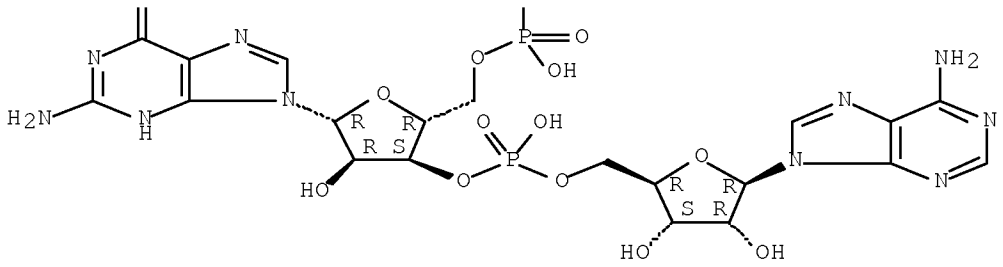


PAGE 2-B

PAGE 3-A

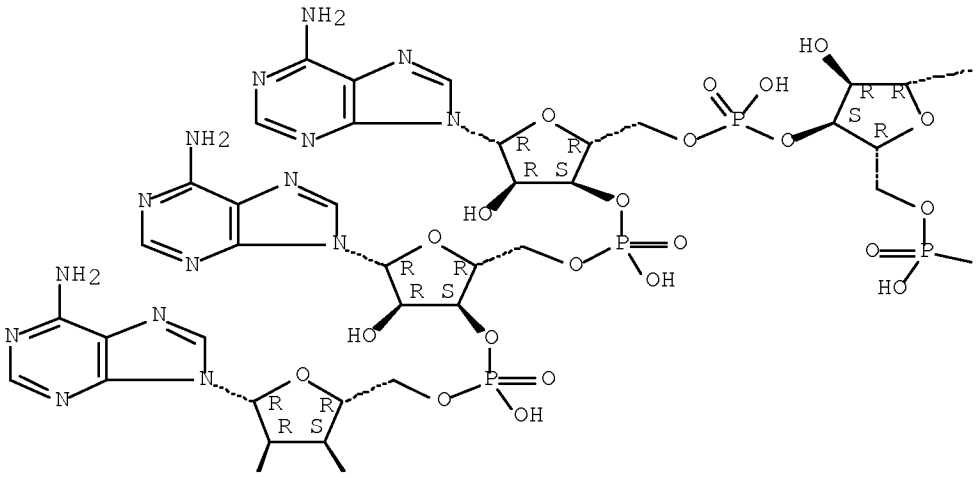


RN 357383-60-9 HCAPLUS

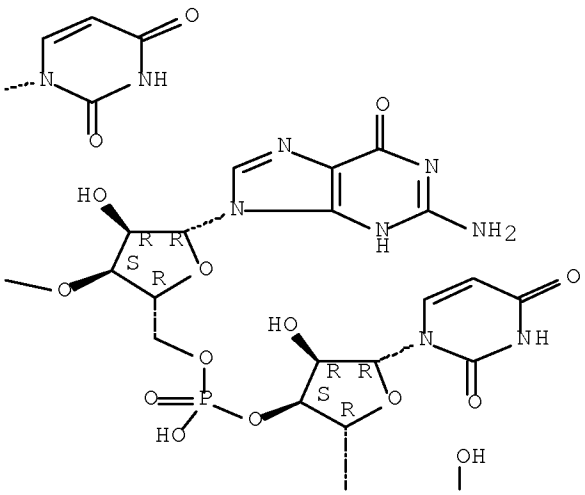
CN Uridine, adenylyl-(3'→5')-uridylyl-(3'→5')-guanylyl-(3'→5')-uridylyl-(3'→5')-adenylyl-(3'→5')-adenylyl-(3'→5')-adenylyl-(3'→5')- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

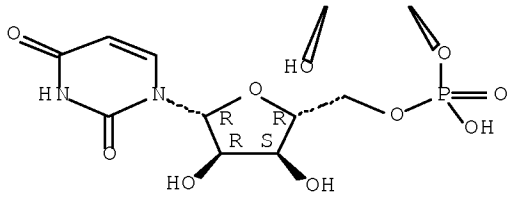
PAGE 1-A



PAGE 1-B



PAGE 2-A



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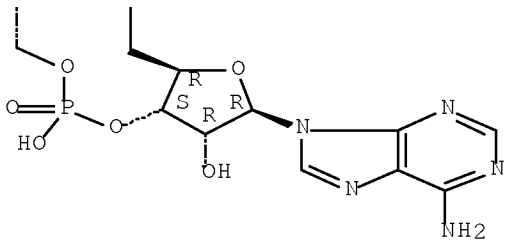
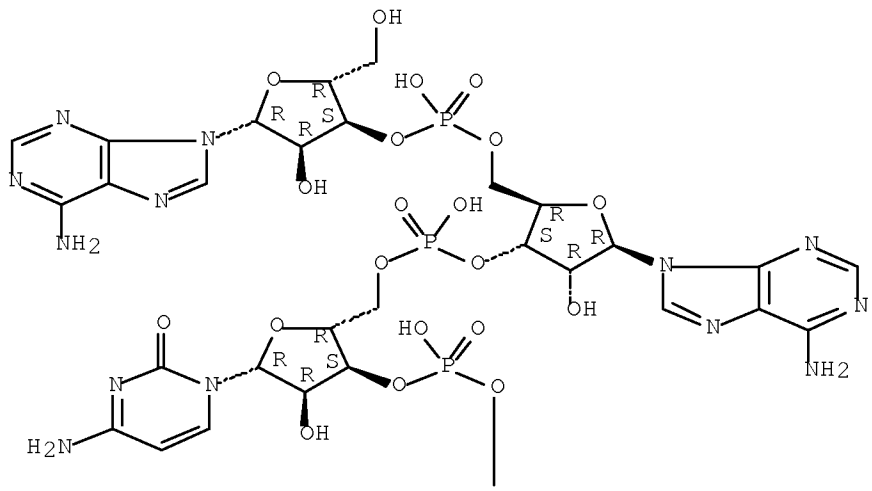


RN 357383-61-0 HCAPLUS

CN Guanosine, adenylyl-(3'→5')-adenylyl-(3'→5')-cytidylyl-(3'→5')-cytidylyl-(3'→5')-cytidylyl-(3'→5')-adenylyl-(3'→5')-adenylyl-(3'→5')- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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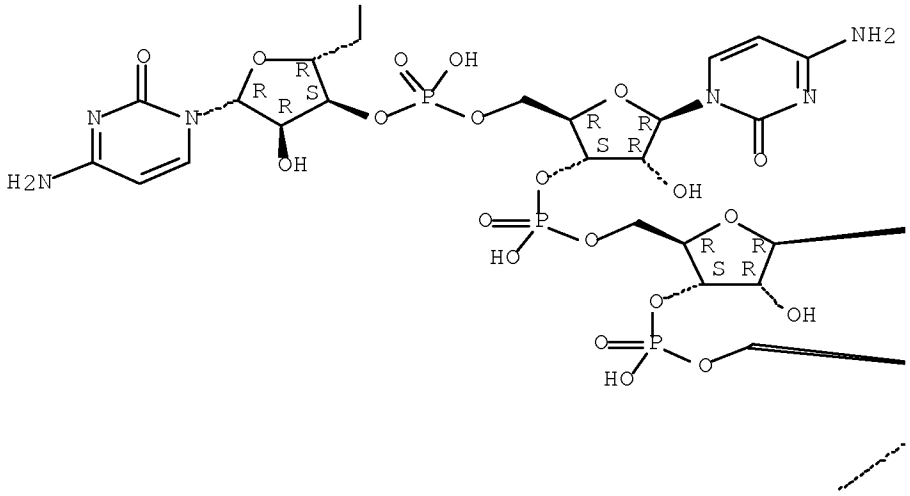

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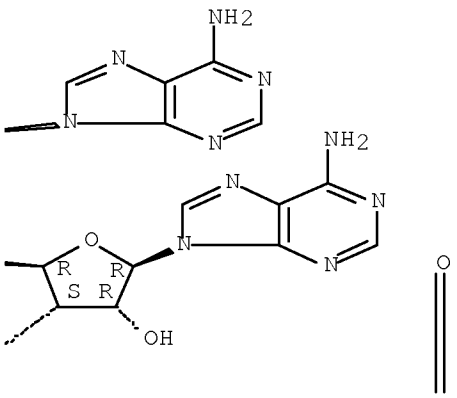

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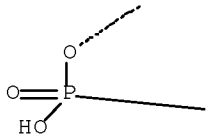

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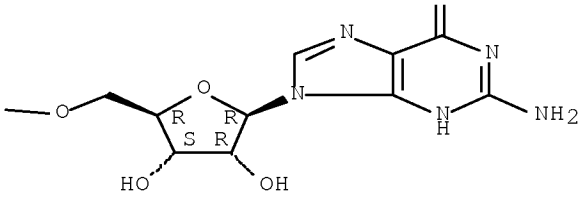

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NCL 435/006.000; 435/007.100; 435/091.100; 435/091.200; 530/300.000; 536/022.100; 536/023.100; 536/024.330

CC 3-1 (Biochemical Genetics)
Section cross-reference(s): 1, 9

ST lectin oligonucleotide ligand SELEX; E L P
selectin ligand oligonucleotide SELEX; wheat germ agglutinin ligand oligonucleotide SELEX

IT Blood-group substances
(Lex, sialyl, oligonucleotides blocking lectin binding of; identification of high affinity nucleic acid ligands to lectins by SELEX)

IT Lymphocyte
(trafficking of, blocking by oligonucleotide ligands for L-selectin of; identification of high affinity nucleic acid ligands to lectins by SELEX)

IT 186183-99-3 186184-00-9 186711-79-5
186711-80-8 186711-81-9 186711-82-0 186711-83-1 186711-84-2
186711-85-3 186711-86-4 186711-87-5 186711-88-6 186711-89-7
186711-90-0 222649-17-4, 60: PN: US6280932 SEQID: 129 claimed DNA 222649-18-5, 61: PN: US6280932 SEQID: 130 claimed DNA 222649-19-6, 62: PN: US6280932 SEQID: 131 claimed DNA 222649-20-9, 63: PN: US6280932 SEQID: 132 claimed DNA 222649-21-0, 64: PN: US6280932 SEQID: 133 claimed DNA 222649-22-1, 65: PN: US6280932 SEQID: 134 claimed DNA 222649-23-2, 66: PN: US6280932 SEQID: 135 claimed DNA 222649-24-3, 67: PN: US6280932 SEQID: 136 claimed DNA 222649-25-4, 68: PN: US6280932 SEQID: 137 claimed DNA 222649-26-5, 69: PN: US6280932 SEQID: 138 claimed DNA 222649-27-6, 70: PN: US6280932 SEQID: 139 claimed DNA 222649-28-7, 71: PN: US6280932 SEQID: 140 claimed DNA 222649-29-8, 72: PN: US6280932 SEQID: 141 claimed DNA 222649-30-1, 73: PN: US6280932 SEQID: 142 claimed DNA 222649-31-2, 74: PN: US6280932 SEQID: 143 claimed DNA 222649-32-3, 75: PN: US6280932 SEQID: 144 claimed DNA 222649-33-4, 76: PN: US6280932 SEQID: 145 claimed DNA 222649-34-5, 77: PN: US6280932 SEQID: 146 claimed DNA 222649-35-6, 78: PN: US6280932 SEQID: 147 claimed DNA 222649-36-7, 79: PN: US6280932 SEQID: 148 claimed DNA 222649-37-8, 80: PN: US6280932 SEQID: 149 claimed DNA 222649-38-9, 81: PN: US6280932 SEQID: 150 claimed DNA 222649-39-0, 82: PN: US6280932 SEQID: 151 claimed DNA 222649-40-3, 83: PN: US6280932 SEQID: 152 claimed DNA 222649-41-4, 84: PN: US6280932 SEQID: 153 claimed DNA 222649-42-5, 85: PN: US6280932 SEQID: 154 claimed DNA 222649-43-6, 86: PN: US6280932 SEQID: 155 claimed DNA 222649-44-7, 87: PN: US6280932 SEQID: 156 claimed DNA 222649-45-8, 88: PN: US6280932 SEQID: 157 claimed DNA 222649-46-9, 89: PN: US6280932 SEQID: 158 claimed DNA 222649-47-0, 90: PN: US6280932 SEQID: 159 claimed DNA 222649-48-1, 91: PN: US6280932 SEQID: 160 claimed DNA 222649-49-2, 92: PN: US6280932 SEQID: 161 claimed DNA 222649-50-5, 93: PN: US6280932 SEQID: 162 claimed DNA 222649-51-6, 94: PN: US6280932 SEQID: 163 claimed DNA 222649-52-7, 95: PN: US6280932 SEQID: 164 claimed DNA 222649-53-8, 96: PN: US6280932 SEQID: 165 claimed DNA 222649-54-9, 97: PN: US6280932 SEQID: 166 claimed DNA 222649-55-0, 98: PN: US6280932 SEQID: 167 claimed DNA 357383-58-5
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357463-39-9 357686-46-5

(nucleotide sequence, ligand for L-selectin; identification of high affinity nucleic acid ligands to lectins by SELEX)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Allen	1996			US 5587468	HCAPLUS
Anon	1987			GB 2183661	HCAPLUS
Anon	1989			WO 8906694	HCAPLUS
Anon	1991			WO 9119813	HCAPLUS
Anon	1992			WO 9214843	HCAPLUS
Anon	1986		60	Biolabs Catalogs	
Cassels	1990	265	14127	J of Biol Chem	HCAPLUS
Defrees	1993	115	7549	J Am Chem Soc	HCAPLUS
Ellington	1990		84	Abstracts of papers	
Foxall	1992	117	895	J Cell Biol	HCAPLUS
Glick	1991	266	23660	J Biol Chem	HCAPLUS
Gold	1993			US 5270163	HCAPLUS
Gold	1995			US 5475096	HCAPLUS
Gold	1995			US 5476766	HCAPLUS
Gold	1996			US 5496938	HCAPLUS
Gold	1996			US 5527894	HCAPLUS
Gold	1996			US 5543293	HCAPLUS
Gold	1996			US 5567588	HCAPLUS
Gold	1997			US 5595877	HCAPLUS
Green	1995	5	29	Glycobiology	HCAPLUS
Imundo	1995	92	3019	Proc Natl Acad Sci U	HCAPLUS
Jacob	1995	34	1210	Biochemistry	HCAPLUS
Janjic	1995			US 5459015	HCAPLUS
Jayasena	1995			US 5472841	HCAPLUS
Joyce	1989	82	83	Gene	HCAPLUS
Joyce	1989	17	711	Nucleic Acids Resear	HCAPLUS
Karlsson	1989	58	309	Annu Rev Biochem	HCAPLUS

Kauffman	1998			US 5723323	HCAPLUS
Kinzler	1989	17	3645	Nucleic Acids Resear	HCAPLUS
Kramer	1974	89	719	J Mol Biol	HCAPLUS
Lasky	1996			US 5484891	HCAPLUS
Lee	1992	6	3193	FASEB	HCAPLUS
Levisohn	1968	60	866	Proc Natl Acad Sci U	MEDLINE
Levisohn	1969	63	805	Proc Natl Acad Sci U	HCAPLUS
Ma	1993	88	649	Circulation	HCAPLUS
Martens	1995	270	21129	J Biol Chem	HCAPLUS
Mihelcic	1994	84	2322	Blood	HCAPLUS
Monsigny	1979	98	39	Eur J Biochem	HCAPLUS
Mulligan	1992	90	1600	J Clin Invest	HCAPLUS
Mulligan	1993	178	623	J Exp Med	HCAPLUS
Mulligan	1993	151	6410	J Immun	HCAPLUS
Mulligan	1994		832	J Immun	HCAPLUS
Mulligan	1993	364	149	Nature	HCAPLUS
Nagata	1974	249	3116	J Biol Chem	HCAPLUS
Nelson	1993	82	3253	Blood	HCAPLUS
Nelson	1994	269	15060	J Biol Chem	
Nelson	1993	91	1157	J Clin Invest	HCAPLUS
Oliphant	1986	44	177	Gene	HCAPLUS
Oliphant	1987	155	568	Methods in Enzymolog	HCAPLUS
Oliphant	1989	9	2944	Mol Cell Biol	HCAPLUS
Oliphant	1988	16	7673	Nucleic Acids Resear	HCAPLUS
Orlandi	1992	116	901	J Cell Biol	HCAPLUS
Parma	1998			US 5780228	HCAPLUS
Parma	1999			US 6001988	HCAPLUS
Petri	1991	57	299	ASM News	
Phillips	1990	250	1130	Science	HCAPLUS
Polisky	1996			US 5580737	HCAPLUS
Robertson	1990	344	467	Nature	HCAPLUS
Saitoh	1991	282	385	FEBS	HCAPLUS
Sanghvi	1996			US 5489677	HCAPLUS
Schneider	1996			US 5503978	HCAPLUS
Seekamp	1991	144	592	Amer J Pathol	
Sherblom	1994	263	5418	J Biol Chem	
Singleton	1987		493	Dictionary of Microb	
Szostak	1988		87	Redesigning the Mole	
Thiesen	1990	18	3203	Nucleic Acids Resear	HCAPLUS
Todderud	1992	52	85	J Leuk Biol	HCAPLUS
Tyrrell	1991	88	10372	Proc Natl Acad Sci U	HCAPLUS
van Landschoot	1977	79	275	Eur J Biochem	HCAPLUS
Watowich	1994	2	719	Structure	HCAPLUS
Watson	1990	110	2221	J Cell Biol	HCAPLUS
Watson	1991	349	164	Nature	HCAPLUS
Winn	1993	92	2042	J Clin Invest	HCAPLUS
Wright	1993	232	620	J Mol Biol	HCAPLUS
Yednock	1987	104	713	J Cell Biol	HCAPLUS
Yuen	1994	269	1595	J Biol Chem	HCAPLUS

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

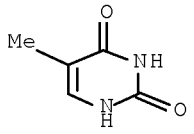
L38 ANSWER 10 OF 15 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2000:59662 HCAPLUS Full-text
DOCUMENT NUMBER: 132:293990
TITLE: α-PNA: A novel peptide nucleic acid analogue of DNA. [Erratum to document cited in CA127:220967]
AUTHOR(S): Howarth, Nicola M.; Wakelin, Laurence P. G.
CORPORATE SOURCE: Cancer Drug Discovery, Dep. Chem., Univ. Coll.

Dublin, Dublin, Ire.
SOURCE: Journal of Organic Chemistry (2000), 65(2), 634
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

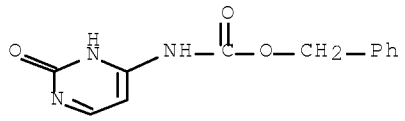
AB On page 5442, the paragraph should read: "During the course of our work, Lenzi et al.21,22 presented a preliminary report on the preparation of an α-PNA in which the base-amino acids are derived from L-glutamic acid.21 This results in an α-PNA of identical chirality (i.e., L-) to that described here.

IT 65-71-4, Thymine 149411-91-6
(preparation of novel backbone-attached peptide nucleic acid building blocks (Erratum))

RN 65-71-4 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 5-methyl- (CA INDEX NAME)



RN 149411-91-6 HCAPLUS
CN Carbamic acid, N-(2,3-dihydro-2-oxo-4-pyrimidinyl)-, phenylmethyl ester (CA INDEX NAME)



CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 26

IT Peptide nucleic acids
(preparation of novel backbone-attached peptide nucleic acid building blocks (Erratum))

IT 65-71-4, Thymine 73-24-5, Adenine, reactions 623-33-6, Glycine ethyl ester hydrochloride 10310-21-1, 2-Amino-6-chloropurine 41088-86-2, N-tert-Butoxycarbonyl-L-homoserine 149411-91-6
(preparation of novel backbone-attached peptide nucleic acid building blocks (Erratum))

IT 63491-82-7P 76969-87-4P 120042-11-7P 165266-76-2P 168264-14-0P 168264-30-0P 177024-64-5P 182052-25-1P 182052-35-3P 194920-04-2P 194920-05-3P 194920-06-4P 194920-07-5P 194920-08-6P 194920-09-7P 194920-10-0P 194920-11-1P 194920-12-2P 194920-13-3P 194920-14-4P 194920-21-3P 194920-23-5P 194920-25-7P 194920-27-9P 194920-28-0P 194920-29-1P 194920-30-4P
(preparation of novel backbone-attached peptide nucleic acid building blocks (Erratum))

IT 194920-15-5P 194920-16-6P 194920-17-7P 194920-18-8P
194920-19-9P
(preparation of novel backbone-attached peptide nucleic acid building blocks (Erratum))

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Abdel-Magid, A	1998	39	3391	Tetrahedron Lett	HCAPLUS
Adamson, J	1992	202	210	Anal Biochem	HCAPLUS
Anon				personal communicati	
Bowden, B	1997			WO 9739025 A1	HCAPLUS
Carpino, L	1990	55	1673	J Org Chem	HCAPLUS
Carpino, L	1995	60	3561	J Org Chem	HCAPLUS
Carroll, A	1994	47	61	Aust J Chem	HCAPLUS
Carroll, A	1996	49	659	Aust J Chem	HCAPLUS
Carroll, A	1996	61	4059	J Org Chem	HCAPLUS
Coleman, R	1999		1399	Synthesis	HCAPLUS
Davidson, B	1993	93	1771	Chem Rev	HCAPLUS
Downing, S	1999	64	826	J Org Chem	HCAPLUS
Ehrlich, A	1996	61	8831	J Org Chem	HCAPLUS
Ehrlich, A	1993	34	4781	Tetrakedron Lett	HCAPLUS
Faulkner, D	1999	16	155	Nat Prod Rep	
Freeman, D	1998	39	3251	Tetrahedron Lett	HCAPLUS
Frerot, E	1991	47	259	Tetrahedron	HCAPLUS
Hamada, Y	1977	25	224	Chem Pharm Bull	HCAPLUS
Harm, A	1996		677	Synlett	HCAPLUS
Kigoshi, H	1999	55	12301	Tetrahedron	HCAPLUS
Lafargue, P	1995	41	947	Heterocycles	HCAPLUS
Lafargue, P	1995		171	Synlett	HCAPLUS
Larsson, U	1994	48	511	Acta Chem Scand	HCAPLUS
McKeever, B	1999	40	9317	Tetrahedron Lett	HCAPLUS
Moody, C	1998		601	J Chem Soc, Perkin T	HCAPLUS
Muir, J	1998		613	Synthesis	HCAPLUS
Nagatsu, A	1995	36	4097	Tetrahedron Lett	HCAPLUS
Nakajima, K	1982	55	3049	Bull Chem Soc Jpn	HCAPLUS
Norley, M	1998	39	3087	Tetrahedron Lett	HCAPLUS
Pettit, G	1996	61	2322	J Org Chem	HCAPLUS
Prinsep, M	1992	55	140	J Nat Prod	HCAPLUS
Rudi, A	1998	54	13203	Tetrahedron	HCAPLUS
Sakatani, M	1986	27	3753	Tetrahedron Lett	
Stanley, M	1992	57	6421	J Org Chem	HCAPLUS
Tanaka, T	1980	53	1352	Bull Chem Soc Jpn	HCAPLUS
Trzeciak, A	1992	33	4557	Tetrahedron Lett	HCAPLUS
Wesson, K	1996	59	629	J Nat Prod	HCAPLUS
Wipf, P	1998		187	Alkaloids:Chemical a	HCAPLUS
Wipf, P	1994	33	1516	Angew Chem, Int Ed E	
Wipf, P	1995	95	2115	Chem Rev	HCAPLUS
Wipf, P	1992	114	10975	J Am Chem Soc	HCAPLUS
Wipf, P	1996	118	12358	J Am Chem Soc	HCAPLUS
Wipf, P	1998	120	4105	J Am Chem Soc	HCAPLUS
Wipf, P	1997		1	Synlett	HCAPLUS
Wipf, P	1994	35	5397	Tetrahedron Lett	HCAPLUS
Wipf, P	1995	36	3639	Tetrahedron Lett	HCAPLUS
Wipf, P	1995	36	6395	Tetrahedron Lett	HCAPLUS
Wipf, P	1999	40	5165	Tetrahedron Lett	HCAPLUS
Yamada, T	1978	51	1897	Bull Chem Soc Jpn	HCAPLUS
Zabriskie, T	1990	112	8080	J Am Chem Soc	HCAPLUS
Zimmer, S	1993		497	Liebigs Ann Chem	HCAPLUS

L38 ANSWER 11 OF 15 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1995:428887 HCAPLUS Full-text
DOCUMENT NUMBER: 122:182025
ORIGINAL REFERENCE NO.: 122:33237a,33240a
TITLE: Immobilization of nucleic acids using capture probes with modifications that block enzymic modification and the use of electroluminescent reporter probes
INVENTOR(S): Kruse-Mueller, Cornelia; Berner, Sibylle; Kaletta, Cortina
PATENT ASSIGNEE(S): Boehringer Mannheim G.m.b.H., Germany
SOURCE: Eur. Pat. Appl., 38 p.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 628568	A2	19941214	EP 1994-108442 <--	19940601
EP 628568	A3	19970305		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
DE 4344742	A1	19941215	DE 1993-4344742 <--	19931228
JP 07184696	A	19950725	JP 1994-127416 <--	19940609
JP 3739423	B2	20060125		
US 5639609	A	19970617	US 1994-257778 <--	19940609
US 6027885	A	20000222	US 1996-771256 <--	19961220
JP 2005097316	A	20050414	JP 2004-333073 <--	20041117

PRIORITY APPLN. INFO.:
DE 1993-4319151 A 19930609 <--
DE 1993-4339086 A 19931116 <--
DE 1993-4344742 A 19931228 <--
JP 1994-127416 A3 19940609 <--
US 1994-257778 A3 19940609 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 122:182025

AB A method is described for immobilization of nucleic acids prepared by enzymic modification, such as amplification, using capture probes that are modified to prevent their modification by the enzymes used, e.g. by blocking the ends or by use of base or sugar analogs. The use of these modified oligonucleotides simplifies the anal. of amplification reactions because they can be incorporated into the amplification reaction. A similarly modified reporter probe carrying an electroluminescent reporter group is also described for use in quantification of the captured nucleic acids. The modifications may include 2'-O-alkylation of the sugar, the use of a base analog such as deazapurine with the electroluminescent group linked to the base by a spacer group. The capture probe is preferably immobilized or it may carry a ligand that allows it to be bound to a derivatized surface. The method is demonstrated using biotinylated oligonucleotides as capture probes optionally

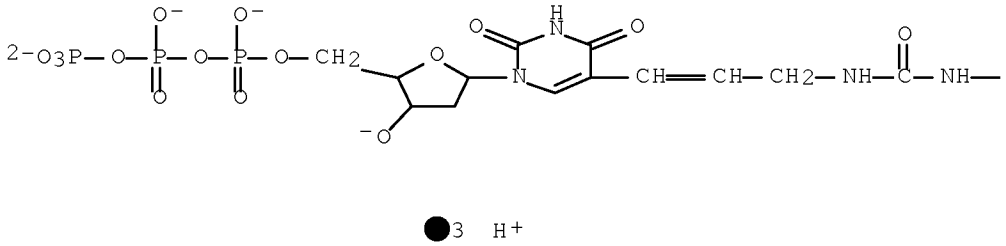
using oligonucleotides containing 2'-O-allyl nucleotides and a 3'- blocking group. The sensitivity of the method is comparable to the prior art; readings at high concns. (>1 pg) of nucleic acids are higher than in prior art methods with the lower endpoints comparable in the 10 fg range.

IT 161698-60-8P 161698-61-9P
(preparation and reactions of, in preparation electroluminescent reporter oligonucleotides; immobilization of nucleic acids using capture probes with modifications that block enzymic modification and the use of electroluminescent reporter probes)

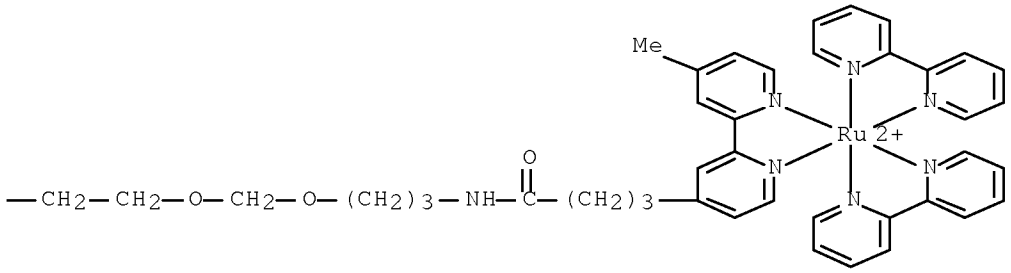
RN 161698-60-8 HCAPLUS

CN Ruthenate(3-), bis(2,2'-bipyridine-N,N')[2'-deoxy-5-[19-(4'-methyl[2,2'-bipyridin]-4-yl)-5,16-dioxo-9,11-dioxa-4,6,15-triazanonadec-1-en-1-yl]uridine 5'-(triphosphato)(5-)]-, trihydrogen, (OC-6-33)- (9CI) (CA INDEX NAME)

PAGE 1-A



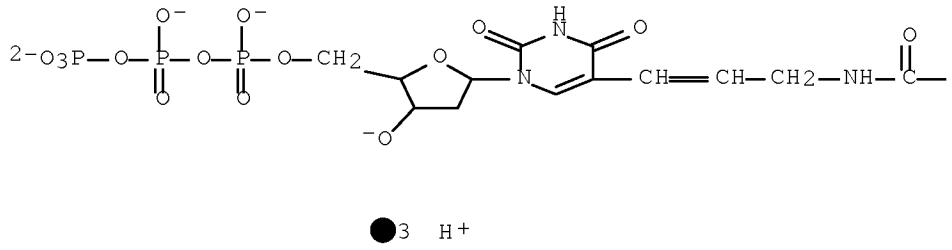
PAGE 1-B



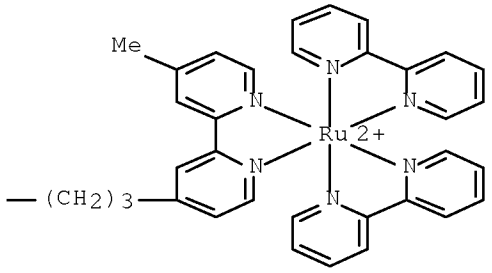
RN 161698-61-9 HCAPLUS

CN Ruthenate(3-), bis(2,2'-bipyridine-N,N')[2'-deoxy-5-[3-[[4-(4'-methyl[2,2'-bipyridin]-4-yl)-1-oxobutyl]amino]-1-propenyl]uridine 5'-(triphosphato)(5-)]-, trihydrogen, (OC-6-33)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IPCI C07H0021-00 [ICM,5]; C07H0019-10 [ICS,5]; C07H0019-20 [ICS,5]; C07H0019-00 [ICS,5,C*]; C12Q0001-68 [ICS,5]; C12P0019-34 [ICS,5]; C12P0019-00 [ICS,5,C*]; C12Q0001-70 [ICA,5]

IPCR C12N0015-09 [I,C*]; C12N0015-09 [I,A]; C07H0019-00 [I,C*]; C07H0019-04 [I,A]; C07H0019-10 [I,A]; C07H0021-00 [I,C*]; C07H0021-00 [I,A]; C07H0021-04 [I,A]; C12Q0001-68 [I,C*]; C12Q0001-68 [I,A]; C12Q0001-70 [I,C*]; C12Q0001-70 [I,A]; G01N0033-50 [I,C*]; G01N0033-50 [I,A]

CC 7-7 (Enzymes)
Section cross-reference(s): 3, 9

IT Polymerase chain reaction
(capture of amplification products in; immobilization of nucleic acids using capture probes with modifications that block enzymic modification and the use of electroluminescent reporter probes)

IT Immobilization, biochemical
Nucleic acid hybridization
(immobilization of nucleic acids using capture probes with modifications that block enzymic modification and the use of electroluminescent reporter probes)

IT Genetic methods
(nucleic acid hybridization for capture of DNA in; immobilization of nucleic acids using capture probes with modifications that block enzymic modification and the use of electroluminescent reporter probes)

IT Luminescent substances
(oligonucleotides containing electroluminescent reporter groups; immobilization of nucleic acids using capture probes with modifications that block enzymic modification and the use of electroluminescent reporter probes)
IT Genetic methods
(NASBA (nucleic acid sequence-based amplification), capture of amplification products in; immobilization of nucleic acids using capture probes with modifications that block enzymic modification and the use of electroluminescent reporter probes)
IT Nucleotides, miscellaneous
(analogs, oligonucleotides containing, as capture or hybridization probes; immobilization of nucleic acids using capture probes with modifications that block enzymic modification and the use of electroluminescent reporter probes)
IT Nucleotides, uses
(oligo-, biotinylated, derivs., base analog-containing, as capture probes; immobilization of nucleic acids using capture probes with modifications that block enzymic modification and the use of electroluminescent reporter probes)
IT Nucleotides, uses
(oligo-, derivs., base analog-containing, as capture probes; immobilization of nucleic acids using capture probes with modifications that block enzymic modification and the use of electroluminescent reporter probes)
IT 161698-60-8P 161698-61-9P
(preparation and reactions of, in preparation electroluminescent reporter oligonucleotides; immobilization of nucleic acids using capture probes with modifications that block enzymic modification and the use of electroluminescent reporter probes)
IT 161679-90-9P
(preparation and reactions of, in preparation electroluminescent reporter oligonucleotides; immobilization of nucleic acids using capture probes with modifications that block enzymic modification and the use of electroluminescent reporter probes)
IT 113728-11-3 161679-89-6 161698-59-5
(reactions of, in preparation electroluminescent reporter oligonucleotides; immobilization of nucleic acids using capture probes with modifications that block enzymic modification and the use of electroluminescent reporter probes)
IT 1476-23-9P, Allyl isocyanate 135795-64-1P 149198-76-5P
(reactions of, in preparation electroluminescent reporter oligonucleotides; immobilization of nucleic acids using capture probes with modifications that block enzymic modification and the use of electroluminescent reporter probes)
OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)

L38 ANSWER 12 OF 15 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1994:210938 HCAPLUS Full-text
DOCUMENT NUMBER: 120:210938
ORIGINAL REFERENCE NO.: 120:37233a,37236a
TITLE: Polyamine-induced Z-DNA conformation in plasmids containing (dA-dC)n·(dG-dT)n inserts and increased binding of lupus autoantibodies to the Z-DNA form of plasmids
AUTHOR(S): Thomas, T. J.; Thomas, Thresia

CORPORATE SOURCE: New Jersey-Robert Wood Johnson Med. Sch., Univ. Med. Dent., New Brunswick, NJ, 08903, USA
SOURCE: Biochemical Journal (1994), 298(2), 485-91
CODEN: BIJOAK; ISSN: 0306-3275
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Blocks of potential Z-DNA-forming (dA-dC)n·(dG-dT)n sequences are ubiquitous in eukaryotic genomes. The authors examined whether naturally occurring polyamines, putrescine, spermidine and spermine, could provoke the Z-DNA conformation in plasmids pDHf2 and pDHf14 with 23 and 60 bp inserts resp. of (dA-dC)n·(dG-dT)n sequences using an e.l.i.s.a. Spermidine and spermine could provoke Z-DNA conformation in these plasmids, but putrescine was ineffective. For pDHf2 and pDHf14, the concentration of spermidine at the midpoint of B-DNA-Z-DNA transition was 25 μM, whereas that of spermine was 16 μM. Polyamine structural specificity was evident in the ability of spermidine homologs to induce Z-DNA. Inorg. cations, Co(NH3)63+ and Ru(NH3)63+, were ineffective. The authors' expts. also showed increased binding of anti-DNA auto-antibodies from lupus patients as well as autoimmune MRL-lpr/lpr mice to pDHf2 and pDHf14 in the presence of polyamines. These data demonstrate that small blocks of (dA-dC)n·(dG-dT)n sequences could assume the Z-DNA conformation in the presence of natural polyamines. Increased concns. of polyamines in the sera of lupus patients might facilitate immune complex-formation involving circulating DNA and anti-Z-DNA antibodies.

IT 55684-99-6, Poly (dA-dC)· poly (dG-dT)
(DNA containing, Z conformation of, polyamine induction of, lupus autoantibody in relation to)

RN 55684-99-6 HCAPLUS

CN Thymidine, 2'-deoxy-5'-O-phosphonoguanylyl-(3'→5')-, homopolymer, complex with 2'-deoxy-5'-O-phosphonoadenylyl-(3'→5')-2'-deoxycytidine homopolymer (1:1) (CA INDEX NAME)

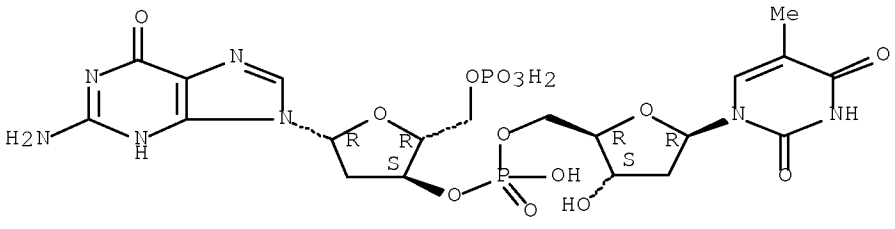
CM 1

CRN 55684-98-5
CMF (C20 H27 N7 O14 P2)x
CCI PMS

CM 2

CRN 38665-20-2
CMF C20 H27 N7 O14 P2

Absolute stereochemistry.



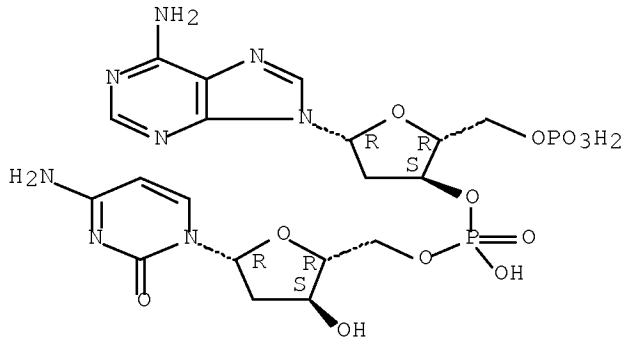
CM 3

CRN 49718-21-0
CMF (C19 H26 N8 O12 P2)x
CCI PMS

CM 4

CRN 38976-21-5
CMF C19 H26 N8 O12 P2

Absolute stereochemistry.



CC 6-2 (General Biochemistry)
Section cross-reference(s): 14
IT 55684-99-6, Poly (dA-dC)· poly (dG-dT)
(DNA containing, Z conformation of, polyamine induction of, lupus autoantibody in relation to)

L38 ANSWER 13 OF 15 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1994:148280 HCAPLUS Full-text
DOCUMENT NUMBER: 120:148280
ORIGINAL REFERENCE NO.: 120:25885a,25888a
TITLE: Organic electroluminescent elements and their fabrication
INVENTOR(S): Ohtani, Junji; Matsumura, Michio; Ikuta, Katsura; Deno, Takashi
PATENT ASSIGNEE(S): Japat Ltd., Switz.
SOURCE: Eur. Pat. Appl., 20 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 563009	A1	19930929	EP 1993-810183 <--	19930315
EP 563009	B1	19980513		
R: DE, GB				
JP 06045074	A	19940218	JP 1993-63875 <--	19930323
JP 3238787	B2	20011217		

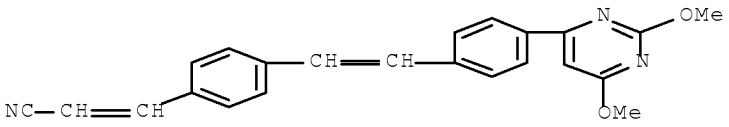
PRIORITY APPLN. INFO.: EP 1992-810210 A 19920323 <--

AB The title elements, comprising (in order) an anode, a hole transport layer, a light-emitting layer, and a cathode, employ cathodes comprising a metal block portion or portions comprising a metal having a high work function and a metal block portion or portions comprising a metal having a low work function, both of the metal block portions of the metal having a high work function and of the metal having a low work function being in contact with the light-emitting layer. Methods for preparing the elements entail vapor deposition of the cathode structures. The elements can give a higher luminance and longer lifetime than those prepared conventionally with a low applied voltage in the constitution of an anode/a hole transport layer/a light-emitting layer/a cathode, and, with no restriction of material used.

IT 79381-51-4 153114-49-9
(electroluminescent devices containing, cathodes with multiple metal sections for)

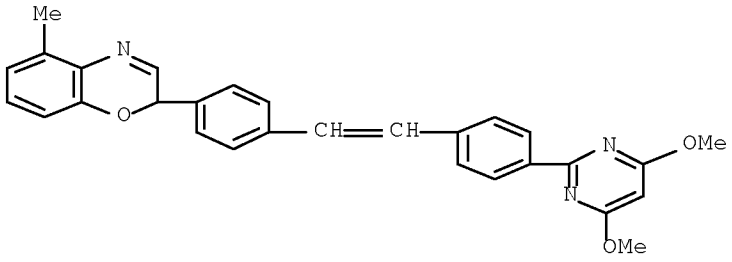
RN 79381-51-4 HCAPLUS

CN 2-Propenenitrile, 3-[4-[2-[4-(2,6-dimethoxy-4-pyrimidinyl)phenyl]ethenyl]phenyl]- (CA INDEX NAME)



RN 153114-49-9 HCAPLUS

CN 2H-1,4-Benzoxazine, 2-[4-[2-[4-(4,6-dimethoxy-2-pyrimidinyl)phenyl]ethenyl]phenyl]-5-methyl- (CA INDEX NAME)



IPCI H05B0033-26 [ICM,5]; H05B0033-10 [ICS,5]

IPCR H05B0033-12 [I,C*]; H05B0033-12 [I,A]; C09K0011-06 [I,C*]; C09K0011-06 [I,A]; H01L0051-50 [I,C*]; H01L0051-50 [I,A]; H01L0051-52 [N,A]; H05B0033-10 [I,C*]; H05B0033-10 [I,A]; H05B0033-26 [I,C*]; H05B0033-26 [I,A]

CC 73-5 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 76

ST multicomponent cathode org electroluminescent device

IT Electric contacts
(for electroluminescent devices, multiple metal sections in)

IT Electroluminescent devices
(organic, cathodes from multiple metals for)

IT Aluminum alloy, base
Copper alloy, base
Gold alloy, base
Indium alloy, base
Lithium alloy, base
Magnesium alloy, base
Nickel alloy, base
Palladium alloy, base
Platinum alloy, base
Silver alloy, base
(cathodes containing, for organic electroluminescent devices)
IT 7429-90-5, Al element, uses 7439-93-2, Li element, uses 7439-95-4, Mg element, uses 7440-02-0, Ni element, uses 7440-05-3, Pd element, uses 7440-06-4, Pt element, uses 7440-22-4, Ag element, uses 7440-50-8, Cu element, uses 7440-57-5, Au element, uses 7440-74-6, In element, uses
(cathodes containing, for organic electroluminescent devices)
IT 2085-33-8 15082-28-7 38215-36-0 65181-78-4 79381-51-4 79381-81-0 109995-82-6 119273-55-1 122738-25-4 153114-48-8 153114-49-9
(electroluminescent devices containing, cathodes with multiple metal sections for)

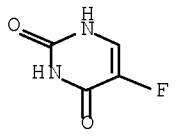
L38 ANSWER 14 OF 15 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1992:34099 HCAPLUS Full-text
DOCUMENT NUMBER: 116:34099
ORIGINAL REFERENCE NO.: 116:5633a,5636a
TITLE: Increased mitochondrial uptake of rhodamine 123 by CDDP treatment
AUTHOR(S): Shinomiya, Nariyoshi; Tsuru, Sumiaki; Katsura, Yoshiya; Sekiguchi, Isao; Suzuki, Mitsuaki; Nomoto, Kikuo
CORPORATE SOURCE: Dep. Microbiol., Natl. Def. Med. Coll., Saitama, 359, Japan
SOURCE: Experimental Cell Research (1992), 198(1), 159-63
CODEN: ECREAL; ISSN: 0014-4827
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Rhodamine 123 (R 123) is a pos. charged dye at physiol. pH that accumulates specifically in the mitochondria of living cells without cytotoxic effect. In the present study, the uptake of R 123 by EL-4 lymphoma cells in culture with anticancer agents was measured by flow cytometry. Changes in R 123 uptake during the cultivation period were compared with cell distribution at different phases of the cell cycle. According to the increase in the proportion of S phase cells, mitochondrial synthesis increased, giving rise to a maximal fluorescence intensity of about 1.3-fold. Synchronous cultures showed the same relationship between increased mitochondrial uptake of R 123 and the S phase fraction as was observed in normal cultures. After treatment with 10-3 M 5-fluorouracil (5-FU) for 1 h, EL-4 cells showed an increased binding of R 123 per cell followed by an accumulation of early S phase cells transiently. However, uptake of R 123 decreased 24 h later. On the contrary, after treatment with 10 μg/mL of cis-diamminedichloroplatinum (CDDP), a G2 + M block was observed from 12 h of reseeding and accumulation of the G2 + M cells continued. In this case, high uptake of R 123 continued during the observation period. From these results, mitochondrial synthesis seemed to increase according to the increment in proportion of S phase when the acceleration of the cell cycle turnover was augmented or the cycle was blocked in S phase by 5-FU. CDDP inhibited the cell division at G2 + M phase and caused increased R 123 fluorescence per cell. The stainability of R 123 may

indicate the activity of cell division and may be a good way of evaluating the efficacy of antitumor drugs on the cells.

IT 51-21-8, 5-Fluorouracil
(neoplasm-inhibiting activity of, cell division and mitochondria response in)

RN 51-21-8 HCAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 5-fluoro- (CA INDEX NAME)



CC 1-6 (Pharmacology)

IT 51-21-8, 5-Fluorouracil 15663-27-1, cis-Diamminedichloroplatinum
(neoplasm-inhibiting activity of, cell division and mitochondria response in)

L38 ANSWER 15 OF 15 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1989:225115 HCAPLUS Full-text

DOCUMENT NUMBER: 110:225115

ORIGINAL REFERENCE NO.: 110:37163a,37166a

TITLE: Increased sensitivity of tumor cells to immune defense cells following treatment with antineoplastic agents in vitro

AUTHOR(S): Ujiie, Toshimitsu

CORPORATE SOURCE: Cancer Res. Inst., Kanazawa Univ., Kanazawa, 920, Japan

SOURCE: Japanese Journal of Experimental Medicine (1989), 59(1), 17-26
CODEN: JJEMAG; ISSN: 0021-5031

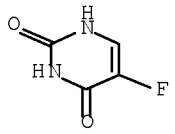
DOCUMENT TYPE: Journal

LANGUAGE: English

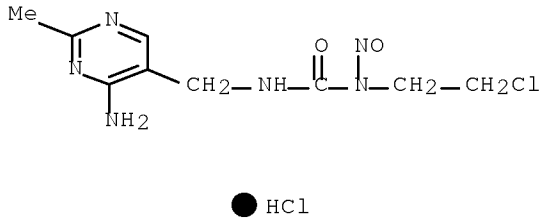
AB Murine EL-4 thymoma cells became highly sensitive to attack by cytotoxic T-lymphocytes (CTL) and allo-reactive T-cells in a 4-h 51Cr-release assay when the target EL-4 cells had been either incubated with 5-fluorouracil, cytosine arabinoside, or hydroxyurea at 37° for 16 h (nearly one generation period), or exposed for 30 min to adriamycin, actinomycin D, bleomycin, mitomycin C, 1-(4-amino-2-methylpyrimidine-5-yl)-methyl-3-(2-chloroethyl)-3- nitrosourea, cis-diamminedichloroplatinum(II), or 4-hydroperoxycyclophosphamide followed by incubation for 16 h. Short-term exposure of EL-4 cells to the latter drugs had no effects on immune lysis in vitro. Target cells treated with these antineoplastic agents had enlarged volume resulting from the blockade of cell division. The major histocompatibility complex (MHC) class I antigens detectable on the cell surface were increased in the treated cells. CTL can lyse altered cells by recognizing foreign antigens in association with MHC class I antigens. Thus, the enhanced sensitivity of target tumor cells to CTL lysis following treatment with antineoplastic agents could be due to increasesed expression of MHC class I antigens. The use of these treatments which made natural killer (NK)-resistant EL-4 cells susceptible to NK lysis, in chemoimmunotherapy of cancer is discussed.

IT 51-21-8, 5-Fluorouracil 55661-38-6, ACNU
(thymoma cell sensitization by, to cytotoxic T-lymphocytes, major histocompatibility antigens in)

RN 51-21-8 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 5-fluoro- (CA INDEX NAME)



RN 55661-38-6 HCAPLUS
CN Urea, N'-[(4-amino-2-methyl-5-pyrimidinyl)methyl]-N-(2-chloroethyl)-N-nitroso-, hydrochloride (1:1) (CA INDEX NAME)



CC 1-6 (Pharmacology)
IT 50-07-7 50-76-0, Actinomycin D 51-21-8, 5-Fluorouracil 127-07-1, Hydroxyurea 147-94-4, Cytosine arabinoside 11056-06-7, Bleomycin 15663-27-1, Cisplatin 23214-92-8, Adriamycin 39800-16-3, 4-Hydroperoxycyclophosphamide 55661-38-6, ACNU
(thymoma cell sensitization by, to cytotoxic T-lymphocytes, major histocompatibility antigens in)